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NEW SOUTH WALES

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LEGISLATION

Proclamations



New South Wales

Proclamation

under the

**Building Legislation Amendment (Quality of Construction) Act
2002 No 134**

JAMES JACOB SPIGELMAN,

By Deputation from Her Excellency the Governor

I, the Honourable James Jacob Spigelman, Lieutenant-Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 2 (1) of the *Building Legislation Amendment (Quality of Construction) Act 2002*, do, by this my Proclamation, appoint 21 February 2003 as the day on which Schedule 1.2 [25] and [26] to that Act commence.

Signed and sealed at Sydney, this 19th day of February 2003.

By His Excellency's Command,

ANDREW REFSHAUGE, M.P.,
Minister for Planning,

GOD SAVE THE QUEEN!

Explanatory note

The object of this Proclamation is to commence certain amendments to the *Environmental Planning and Assessment Regulation 2000* made by the *Building Legislation Amendment (Quality of Construction) Act 2002*. The amendments provide that a person commits a separate offence for each week that he or she fails to give certain fire safety documents to the local council in accordance with the requirements of the *Environmental Planning and Assessment Regulation 2000*.



Proclamation

under the

Crimes Legislation Amendment Act 2002 No 130

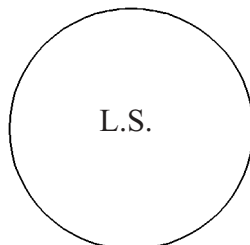
JAMES JACOB SPIGELMAN,
By Deputation from Her Excellency the Governor

I, the Honourable James Jacob Spigelman, Lieutenant-Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 2 of the *Crimes Legislation Amendment Act 2002*, do, by this my Proclamation:

- (a) appoint 24 February 2003 as the day on which the uncommenced provisions of that Act (other than Schedules 4 [2]–[5], 6, 9 [1]–[3] and 10) commence, and
- (b) appoint 1 May 2003 as the day on which Schedules 4 [2]–[5] and 10 to that Act commence.

Signed and sealed at Sydney, this 19th day of February 2003.

By His Excellency's Command,



BOB DEBUS, M.P.,
Attorney General

GOD SAVE THE QUEEN!

Proclamation

Explanatory note

Explanatory note

The object of this Proclamation is to commence:

- (a) amendments to the *Children (Criminal Proceedings) Act 1987* relating to the definition of ***serious children's indictable offence*** in the Act and to the criteria that a court must take into account in deciding whether to sentence a child who has committed an indictable offence according to law or in accordance with certain provisions of the Act, and
- (b) amendments to the *Confiscation of Proceeds of Crime Act 1989* relating to the confiscation of property and benefits derived by a defendant who has committed a serious offence for the depiction of the offence or the expression of the defendant's views about the offence in a publication, recording or in the media, and
- (c) amendments to the *Crimes Act 1900* relating to the detention of arrested persons for the purposes of investigations, and
- (d) amendments to the *Mental Health (Criminal Procedure) Act 1990* relating to the making of community treatment orders, and
- (e) amendments to the *Search Warrants Act 1985* relating to the videotaping of the execution of search warrants and the detention of arrested persons on premises being searched under a search warrant.



Proclamation

under the

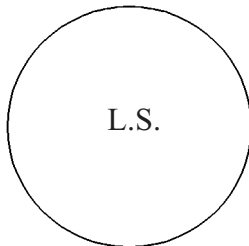
Crimes Legislation Amendment (Criminal Justice Interventions)
Act 2002 No 100

JAMES JACOB SPIGELMAN,
By Deputation from Her Excellency the Governor

I, the Honourable James Jacob Spigelman, Lieutenant-Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 2 (1) of the *Crimes Legislation Amendment (Criminal Justice Interventions) Act 2002*, do, by this my Proclamation, appoint 24 February 2003 as the day on which that Act (other than Schedule 1 [3]) commences.

Signed and sealed at Sydney, this 19th day of February 2003.

By His Excellency's Command,



BOB DEBUS, M.P.,
Attorney General

GOD SAVE THE QUEEN!



Proclamation

under the

Police Act 1990

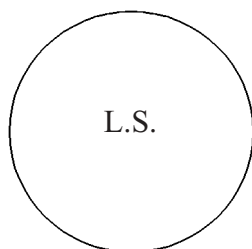
MARIE BASHIR, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 34 of the *Police Act 1990*, do, by this my Proclamation, amend Schedule 2 (NSW Police senior executive positions) to that Act by inserting “Commander, Counter Terrorist Co-ordination Command” at the end of that Schedule.

Signed and sealed at Sydney, this 22nd day of January 2003.

By Her Excellency’s Command,

MICHAEL COSTA, M.L.C.,
Minister for Police



GOD SAVE THE QUEEN!

Explanatory note

Section 33 of the *Police Act 1990* provides that the NSW Police Senior Executive Service comprises the persons holding the positions referred to in Schedule 2 to that Act. The object of this proclamation is to add the position of Commander, Counter Terrorist Co-ordination Command to Schedule 2 to the Act.



Proclamation

under the

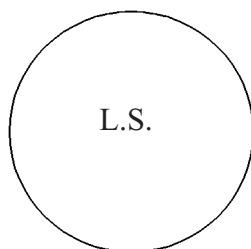
Statute Law (Miscellaneous Provisions) Act 2002 No 53

JAMES JACOB SPIGELMAN,
By Deputation from Her Excellency the Governor

I, the Honourable James Jacob Spigelman, Lieutenant-Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 2 (2) of the *Statute Law (Miscellaneous Provisions) Act 2002*, do, by this my Proclamation, appoint 21 February 2003 as the day on which Schedule 1.9 to that Act commences.

Signed and sealed at Sydney, this 19th day of February 2003.

By His Excellency's Command,



JOHN AQUILINA, M.P.,
Minister for Fair Training

GOD SAVE THE QUEEN!

Explanatory note

The object of this Proclamation is to commence the provisions of the *Statute Law (Miscellaneous Provisions) Act 2002* that amend the *Fair Trading Act 1987* so as to increase the membership of the Retirement Villages Advisory Council (established by the latter Act) from 14 members to 16.

Regulations



New South Wales

Civil Liability Regulation 2003

under the

Civil Liability Act 2002

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Civil Liability Act 2002*.

BOB DEBUS, M.P.,
Attorney General

Explanatory note

The object of this Regulation is to prescribe non-government schools as **public or other authorities** for the purposes of Part 5 of the *Civil Liability Act 2002*, so putting non-Government schools on the same footing as Government schools with respect to civil liability in tort.

This Regulation is made under the *Civil Liability Act 2002*, including section 4 (2), the general power to make regulations) and section 41.

Clause 1 Civil Liability Regulation 2003

Civil Liability Regulation 2003

under the

Civil Liability Act 2002

1 Name of Regulation

This Regulation is the *Civil Liability Regulation 2003*.

2 Non-government schools

A person or body that conducts a non-government school:

- (a) that is registered under Division 3 of Part 7 of the *Education Act 1990*, or
- (b) that is exempted from registration under Division 7 of Part 7 of that Act,

is prescribed as an authority to which Part 5 of the *Civil Liability Act 2002* applies in respect of any function exercised by or on behalf of that person or body in connection with the conduct of that school.



Crimes Amendment (Detention after Arrest) Regulation 2003

under the

Crimes Act 1900

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Crimes Act 1900*.

BOB DEBUS, M.P.,
Attorney General

Explanatory note

The object of this Regulation is to amend forms relating to detention warrants to reflect requirements of Part 10A of the *Crimes Act 1900*.

This Regulation is made under the *Crimes Act 1900*, including section 356I and section 582 (the general regulation-making power).

Clause 1 Crimes Amendment (Detention after Arrest) Regulation 2003

Crimes Amendment (Detention after Arrest) Regulation 2003

under the

Crimes Act 1900

1 Name of Regulation

This Regulation is the *Crimes Amendment (Detention after Arrest) Regulation 2003*.

2 Commencement

This Regulation commences on 27 February 2003.

3 Amendment of Crimes (Detention after Arrest) Regulation 1998

The *Crimes (Detention after Arrest) Regulation 1998* is amended as set out in Schedule 1.

Crimes Amendment (Detention after Arrest) Regulation 2003

Amendments

Schedule 1

Schedule 1 Amendments

(Clause 3)

[1] Schedule 2 Forms

Omit paragraph 1 of Form 1. Insert instead:

1. The detained person was arrested (within the meaning of Part 10A of the *Crimes Act 1900*) at..... am/pm on.....

The nature of the offence/offences under investigation is as follows:

(specify nature of offence or offences)

[2] Schedule 2, Form 1

Insert “general nature of the” before “evidence” in paragraph 3.

[3] Schedule 2, Form 1

Omit paragraph 6. Insert instead:

6. The reasons I believe that the continued detention of the detained person is reasonably necessary to complete the investigation are as follows:

(specify reasons)



New South Wales

Crimes (Forensic Procedures) Amendment (Disclosure of Information) Regulation 2003

under the

Crimes (Forensic Procedures) Act 2000

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Crimes (Forensic Procedures) Act 2000*.

BOB DEBUS, M.P.,
Attorney General

Explanatory note

Section 109 of the *Crimes (Forensic Procedures) Act 2000* makes it an offence for a person who has access to information stored on the DNA database system or revealed by a forensic procedure carried out under that Act to disclose that information except in certain specified circumstances.

The object of this Regulation is to amend the *Crimes (Forensic Procedures) Regulation 2000* to prescribe as purposes for which a person may disclose such information any purpose relating to the security classification, placement or management under the *Crimes (Administration of Sentences) Act 1999* of a person who is or was a serious indictable offender serving a sentence of imprisonment in a correctional centre or other place of detention on whom a forensic procedure has been carried out under Part 7 of the *Crimes (Forensic Procedures) Act 2000*.

This Regulation is made under the *Crimes (Forensic Procedures) Act 2000*, including sections 109 (2) (g) and (3) (o) and 118 (the general regulation-making power).

Clause 1 Crimes (Forensic Procedures) Amendment (Disclosure of Information)
Regulation 2003

Crimes (Forensic Procedures) Amendment (Disclosure of Information) Regulation 2003

under the

Crimes (Forensic Procedures) Act 2000

1 Name of Regulation

This Regulation is the *Crimes (Forensic Procedures) Amendment (Disclosure of Information) Regulation 2003*.

2 Amendment of Crimes (Forensic Procedures) Regulation 2000

The *Crimes (Forensic Procedures) Regulation 2000* is amended as set out in Schedule 1.

Crimes (Forensic Procedures) Amendment (Disclosure of Information)
Regulation 2003

Amendments

Schedule 1

Schedule 1 Amendments

(Clause 2)

[1] Clause 11 Disclosure of information

Omit “This clause” from clause 11 (2).

Insert instead “Subclause (1)”.

[2] Clause 11 (2)

Omit “this clause”.

Insert instead “subclause (1)”.

[3] Clause 11 (3)–(7)

Insert after clause 11 (2):

- (3) For the purposes of section 109 (2) (g) of the Act, any purpose relating to the security classification, placement or management by or under the *Crimes (Administration of Sentences) Act 1999* of a classifiable person is a prescribed purpose for which a person may disclose information that relates to the classifiable person that is stored on the DNA database system.
- (4) Subclause (3) applies whether the information concerned was stored on the DNA database system before, or is so stored after, the commencement of subclause (3).
- (5) For the purposes of section 109 (3) (o) of the Act, any purpose relating to the security classification, placement or management by or under the *Crimes (Administration of Sentences) Act 1999* of a classifiable person is a prescribed purpose for which a person may disclose information relating to the classifiable person revealed by the forensic procedure that was carried out on the classifiable person.
- (6) Subclause (5) applies whether or not the information concerned is revealed by a forensic procedure that was carried out before or is carried out after the commencement of subclause (5).
- (7) In this clause, *classifiable person* means a person who is or was a serious indictable offender on whom a forensic procedure has been carried out under Part 7 of the *Crimes (Forensic Procedures) Act 2000*.



New South Wales

Criminal Procedure Amendment (Circle Sentencing Intervention Program) Regulation 2003

under the

Criminal Procedure Act 1986

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Criminal Procedure Act 1986*.

BOB DEBUS, M.P.,
Attorney General

Explanatory note

The objects of this Regulation are:

- (a) to declare a circle sentencing program to be an intervention program for the purposes of Part 9 of the *Criminal Procedure Act 1986* (as inserted by the *Crimes Legislation Amendment (Criminal Justice Interventions) Act 2002*), and
- (b) to regulate entry into, and the conduct of, the program.

A circle sentencing intervention program enables certain Aboriginal offenders who have pleaded guilty to, or been found guilty of, certain offences before Local Courts to participate in groups that are constituted to consider appropriate punishments and treatment and rehabilitation plans for the offenders. Other participants in a circle sentencing group include the presiding Magistrate in the Local Court proceedings, the offender's legal representatives, the prosecutor, victims and appropriate members of the Aboriginal community to which the offender belongs.

This Regulation is made under the *Criminal Procedure Act 1986*, including section 5 (the general regulation-making power) and sections 175 and 179.

Clause 1 Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Criminal Procedure Amendment (Circle Sentencing Intervention Program) Regulation 2003

under the

Criminal Procedure Act 1986

1 Name of Regulation

This Regulation is the *Criminal Procedure Amendment (Circle Sentencing Intervention Program) Regulation 2003*.

2 Commencement

This Regulation commences on 24 February 2003.

3 Amendment of Criminal Procedure Regulation 2000

The *Criminal Procedure Regulation 2000* is amended as set out in Schedule 1.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

Schedule 1 Amendments

(Clause 3)

[1] Part 3B

Insert after Part 3A:

Part 3B Intervention programs

11D Circle sentencing intervention program

The program of measures described in Part 4 of Schedule 3 (Circle sentencing intervention program) for dealing with offenders is declared to be an intervention program for the purposes of Part 9 of the Act.

[2] Schedule 3

Insert after Schedule 2:

Schedule 3 Circle sentencing intervention program

(Clause 11D)

Part 1 Interpretation

1 Definitions

In this Schedule:

Aboriginal Community Justice Group for a participating court means the Aboriginal Community Justice Group established for that court under Part 6.

Aboriginal person means a person who:

- (a) is a member of the Aboriginal race of Australia, and
- (b) identifies as an Aboriginal person, and,
- (c) is accepted by the Aboriginal community as an Aboriginal person.

circle sentencing group for a referred offender means a circle sentencing group convened under Part 4 for the offender.

guidelines means guidelines issued by the Minister under clause 23.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

offender means a person who has pleaded guilty to, or has been found guilty of, an offence before a participating court where that offence is an offence in respect of which an intervention program may be conducted as provided by section 176 of the Act.

participating court means any Local Court declared to be a participating court for the program by the Minister by order published in the Gazette.

presiding Magistrate means the Magistrate presiding over the participating court that refers a referred offender.

program means the program of measures described in Part 4.

program participation order means a grant of bail by, or other order of, a participating court made in respect of an offender for the purpose of allowing the offender to participate in the program.

Project Officer for a participating court means the Project Officer (Circle Sentencing) for the court referred to in clause 18 (1).

referral means the referral of an offender for assessment under a suitability assessment order or for participation in the program under a program participation order (as the case may be).

referred offender means an offender that is the subject of:

- (a) a suitability assessment order, or
- (b) a program participation order.

suitability assessment order means a grant of bail by, or other order of, a participating court made in respect of an offender for the purpose of allowing an assessment of the offender's capacity and prospects for participation in the program to be made.

victim has the same meaning as ***victim of crime*** has for the purposes of the *Victims Rights Act 1996*.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

Part 2 Overview of process

2 Summary of process involved in entry into and participation in program

(1) The following is a summary of the process involved in referring an offender for participation in the program:

(a) **Suitability assessment order made**

A participating court makes a suitability assessment order in respect of the offender.

(b) **Project Officer convenes meeting of Aboriginal Community Justice Group**

The Project Officer for the court convenes a special meeting of the Aboriginal Community Justice Group for the court under Part 3 to assess whether the offender is a suitable candidate to participate in the program.

(c) **Aboriginal Community Justice Group assesses offender**

The Aboriginal Community Justice Group meets to assess the offender's suitability having regard to certain criteria. The Group may either assess the offender as being suitable or not suitable for participation. In either event, the Group must report its finding to the court that referred the offender.

(d) **Court determines whether program participation order should be made**

If the Aboriginal Community Justice Group assesses an offender as not being suitable for participation, the offender will not be eligible to participate in the program. However, if the Group assesses the offender to be suitable, the participating court may then make a program participation order if it is satisfied that the offender is otherwise eligible to participate and that it would be appropriate for the offender to participate in the program.

(e) **Offender enters into agreement to participate**

The offender enters into an agreement to participate in the program.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

(f) **Project Officer convenes a circle sentencing group**

The Project Officer will then convene a circle sentencing group constituted as provided by Part 4 for the purpose of recommending an appropriate sentence and determining a treatment and rehabilitation plan for the offender. The Magistrate that refers the offender will preside over the circle sentencing group.

(g) **Offender must comply with program and any intervention plan**

An offender must comply with the program participation order and any intervention plan determined by the circle sentencing group. A failure to do so may result in the offender being returned to the participating court for the court to deal with the offender.

(h) **Court may pronounce a sentence**

The court that referred the offender may, if it agrees with the consensus of the circle sentencing group on the issue, impose a sentence on the offender in the terms recommended by the group following the conclusion of the circle. Any such sentence will be pronounced in open court.

- (2) This clause does not affect the meaning or interpretation of any provision of this Schedule that it summarises.

Part 3 Assessment of suitability to participate

3 Notification of suitability assessment order

A participating court that makes a suitability assessment order in respect of a referred offender must notify the Project Officer for the court of the order.

4 Convening of meeting of Aboriginal Community Justice Group

The Project Officer for the participating court must convene a meeting of the Aboriginal Community Justice Group for the court to assess the suitability of a referred offender to participate in the program as soon as practicable after being notified of a suitability assessment order in respect of the offender.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

5 Meeting of Aboriginal Community Justice Group to assess referred offender

A meeting of an Aboriginal Community Justice Group convened by the Project Officer for a participating court under clause 4 is to be attended by at least 3 members of the Group chosen by the Project Officer.

6 Role of Aboriginal Community Justice Group convened to assess referred offender

- (1) In assessing the suitability of a referred offender to participate in the program, the Aboriginal Community Justice Group to which the offender has been referred is to have regard to the following matters:
 - (a) the nature of the offence committed by the offender,
 - (b) whether the offender is part of an Aboriginal community in the trial location or has a close association or kinship with any such community,
 - (c) the impact of the offence on its victims and the Aboriginal community to which the offender belongs or with which the offender has a close association or kinship,
 - (d) the potential benefits to the offender, the victims, the Aboriginal community and the community generally should the offender participate in the program,
 - (e) any other matter that it considers relevant.
- (2) The Aboriginal Community Justice Group to which an offender has been referred must report to the participating court that made the suitability assessment order in the form approved by the Minister within 14 days (or such further period as the court may allow) after the Group has been convened.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

Part 4 The circle sentencing intervention program

7 Objectives of the program

The objectives of the program are as follows:

- (a) to include members of Aboriginal communities in the sentencing process,
- (b) to increase the confidence of Aboriginal communities in the sentencing process,
- (c) to reduce barriers between Aboriginal communities and the courts,
- (d) to provide more appropriate sentencing options for Aboriginal offenders,
- (e) to provide effective support to victims of offences by Aboriginal offenders,
- (f) to provide for the greater participation of Aboriginal offenders and their victims in the sentencing process,
- (g) to increase the awareness of Aboriginal offenders of the consequences of their offences on their victims and the Aboriginal communities to which they belong,
- (h) to reduce recidivism in Aboriginal communities.

8 Eligibility to participate in program

A person is eligible to participate in the program only if the person:

- (a) is an Aboriginal person, and
- (b) is an offender, and
- (c) has been assessed as suitable for participation in the program by the Aboriginal Community Justice Group for the court at a meeting convened in accordance with Part 3, and
- (d) enters into an agreement to participate in the program.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

9 Measures that constitute the circle sentencing program

The program is constituted by the following measures:

(a) **Offender agrees to enter into agreement to participate in the program**

A participating court refers an offender for participation in a circle sentencing intervention program by making a program participation order and the offender enters into an agreement to participate in the program.

(b) **Constitution of circle sentencing group**

The Project Officer for the court, in consultation with the presiding Magistrate, convenes a circle sentencing group for the referred offender.

(c) **Circle sentencing group determines intervention plan for offender and recommends sentence**

The circle sentencing group meets:

- (i) to determine an appropriate plan (if any) for the treatment or rehabilitation of the referred offender, and
- (ii) to recommend an appropriate sentence for the offender.

(d) **Offender to comply with intervention plan**

The offender complies with the requirements of an intervention plan (if any) determined by the circle sentencing group.

Note. Section 174 (1) of the Act defines *intervention plan* to mean a plan, agreement or arrangement arising out of the participation of an offender or an accused person in an intervention program.

10 Convening of circle sentencing group

- (1) A participating court that makes a program participation order in respect of a referred offender must notify the Project Officer for the court of the order.
- (2) The Project Officer must convene a circle sentencing group for the referred offender as soon as practicable after being notified of the making of a program participation order in respect of the offender.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

11 Constitution of circle sentencing group

- (1) A circle sentencing group for a referred offender convened by the Project Officer under clause 10 (2) must include the following persons:
- (a) the presiding Magistrate,
 - (b) the offender,
 - (c) the offender's legal representatives (unless the offender directs otherwise),
 - (d) the prosecutor,
 - (e) the Project Officer,
 - (f) at least 3 Aboriginal persons (but no more than the maximum number of persons specified in the guidelines) chosen by the Project Officer, being persons who:
 - (i) the Project Officer is satisfied belong to the Aboriginal community of which the offender claims to be part or with which the offender claims to have a close association or kinship, and
 - (ii) have been recommended to the Project Officer by the Aboriginal Community Justice Group for the court that made the program participation order.
- (2) A circle sentencing group convened by a Project Officer may (but need not) include the following persons:
- (a) any victim of the offender's offence who consents to participate in the group,
 - (b) a support person for any such victim chosen by the victim,
 - (c) a support person for the offender chosen by the offender,
 - (d) any other person or persons chosen by the Project Officer, but only with the consent of the offender and, if a victim is participating, the consent of the victim.
- (3) A member of a circle sentencing group may object to the participation in the group of a person chosen by the Project Officer for the purposes of subclause (1) (f) or (2) (d). The presiding Magistrate is to determine any such objection.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

12 Functions of circle sentencing groups

- (1) The functions of a circle sentencing group are as follows:
 - (a) to determine an appropriate plan for the treatment or rehabilitation of a referred offender,
 - (b) to recommend an appropriate sentence for the offender,
 - (c) to provide support or other assistance to the offender in completing the program or an intervention plan arising out of the program,
 - (d) such other functions as may be imposed or conferred on the group by this Schedule or the guidelines.
- (2) Without limiting subclause (1) (a), a circle sentencing group may require a referred offender to comply with a plan that includes requirements relating to any one or more of the following:
 - (a) the conduct and good behaviour of the offender,
 - (b) attendance for counselling or other treatment,
 - (c) the supervision of the offender for the duration of the plan,
 - (d) residence, association with other persons or attendance at specified locations,
 - (e) involvement in activities, courses, training or employment for the purpose of promoting the re-integration of the offender into the community,
 - (f) such other matters as the group considers would promote the treatment or rehabilitation of the offender.

13 Exclusions of persons from meetings of circle sentencing groups

- (1) The presiding Magistrate may exclude a person (other than the offender or a victim) from participation in a circle sentencing group if the Magistrate is satisfied that:
 - (a) the person has a conflict of interest that would prevent the person from impartially discharging his or her obligations as a member of the group, or
 - (b) the behaviour of the person is disrupting the orderly conduct of a meeting of the group.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

- (2) The Magistrate may, with the agreement of the other members of the group, invite another person to replace a person who has been excluded from participating in the group under subclause (1). However, if the other members do not agree, the Project Officer is to convene a new circle sentencing group for the offender excluding any such person.
- (3) A person who is not a member of the circle sentencing group may not attend a meeting of the group unless all of the following persons consent:
 - (a) the presiding Magistrate,
 - (b) the offender,
 - (c) if a victim is participating in the group, the victim.

14 Victims to be heard

If a victim agrees to participate in a circle sentencing group, the victim must be given an opportunity to express his or her views about the offender and the nature of the offence committed against the victim.

15 Procedure generally

- (1) The procedure for the calling of meetings of a circle sentencing group and the conduct of business at those meetings is, subject to this Schedule and the guidelines, to be as determined by the group.
- (2) The presiding Magistrate is to preside at a meeting of a circle sentencing group.
- (3) The quorum for a meeting of a circle sentencing group is all of the members of the group (other than members excluded under clause 13).
- (4) A decision supported by a majority of the members in a meeting of the circle sentencing group is to be treated as a decision of the whole group.

16 Records of meetings

The presiding Magistrate must make a record (or cause a record to be made) of the following matters in connection with a circle sentencing group:

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

-
- (a) the name, address and date of birth of the referred offender,
 - (b) the nature of the offence,
 - (c) the name of the Project Officer,
 - (d) the names of the other members of the group and the capacity in which they participated,
 - (e) the dates on, and the locations at, which the circle sentencing group met,
 - (f) particulars of any intervention plan determined, or sentence recommended, by the group,
 - (g) the major points of discussion of the group,
 - (h) any other matter that the Magistrate considers relevant.

17 Reconvening of the circle sentencing group

- (1) The Project Officer may, in consultation with the presiding Magistrate, reconvene a circle sentencing group after it has determined an intervention plan or recommended an appropriate sentence (or both) for a referred offender for the purpose of reconsidering any matter it had previously determined or recommended.
- (2) The members of the reconvened group should, so far as is reasonably possible, be the same members who participated in the original circle sentencing group.
- (3) A circle sentencing group cannot be reconvened if:
 - (a) the period of 3 months has elapsed since the matter to be reconsidered was originally determined or recommended by the group, or
 - (b) the court that referred the referred offender to the group has imposed a sentence on the offender for the offence (whether or not in the terms recommended by the group).

Part 5 Project Officers

18 Project Officer (Circle Sentencing)

- (1) The Minister is to ensure that there is a Project Officer (Circle Sentencing) for each participating court.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

- (2) The functions of a Project Officer include (but are not limited to) the following functions:
- (a) contacting victims of a referred offender for the purpose of ascertaining whether they wish to participate in a circle sentencing group for the offender,
 - (b) informing any such offender of:
 - (i) the processes involved in the program or in being assessed for participation in the program, and
 - (ii) the offender's obligations under the program or an intervention plan arising out of the program,
 - (c) convening meetings of Aboriginal Community Justice Groups and circle sentencing groups,
 - (d) monitoring the compliance of an offender with his or her obligations under the program or an intervention plan arising out of the program and reporting any non-compliance to the participating court that referred the offender and to the Aboriginal Community Justice Group for the court,
 - (e) such other functions as may be imposed or conferred on the Project Officer by this Schedule or the guidelines.

Part 6 Aboriginal Community Justice Groups

19 Minister to establish Aboriginal Community Justice Groups for each court

The Minister is to establish an Aboriginal Community Justice Group for each participating court.

20 Appointment of members of Aboriginal Community Justice Groups

- (1) The Minister may appoint such Aboriginal persons as the Minister considers necessary to be members of an Aboriginal Community Justice Group established under clause 19.
- (2) The Minister may make an appointment under subclause (1) only on the recommendation of the Project Officer for the participating court concerned.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

-
- (3) A person appointed as a member under subclause (1) is appointed for a period of 2 years, unless before the expiry of that period:
 - (a) the person resigns his or her appointment, or
 - (b) the person's appointment is revoked by the Minister.
 - (4) A person appointed as a member under subclause (1) may resign his or her appointment by written notice to the Minister.
 - (5) The Minister may revoke the appointment of a person as a member of an Aboriginal Community Justice Group at any time by written notice to the person.
 - (6) Nothing in this clause prevents the Minister from re-appointing a person as a member of an Aboriginal Community Justice Group under subclause (1) following the expiry of a previous period of appointment or the revocation of a previous appointment.

21 Functions of Aboriginal Community Justice Groups

The functions of an Aboriginal Community Justice Group include (but are not limited to) the following functions:

- (a) assessing the suitability of a referred offender to participate in the program and reporting to the participating court that referred the offender about the offender's suitability,
- (b) recommending appropriate Aboriginal persons to participate in a circle sentencing group for a referred offender,
- (c) such other functions as may be imposed or conferred on the Group by this Schedule or the guidelines.

22 Procedure

- (1) The procedure for the calling of meetings of an Aboriginal Community Justice Group and the conduct of business at those meetings is, subject to this Schedule and the guidelines, to be as determined by the Group.
- (2) The quorum for a meeting of an Aboriginal Community Justice Group is 3 members of the Group.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

- (3) A decision supported by a majority of the members in attendance at a meeting of an Aboriginal Community Justice Group is to be treated as a decision of the whole Group.

Part 7 Guidelines

23 Minister may issue guidelines in respect of the conduct of the program

- (1) The Minister may issue guidelines, not inconsistent with this Schedule, from time to time with respect to any or all of the following matters:
- (a) the constitution and procedure for meetings of Aboriginal Community Justice Groups and circle sentencing groups,
 - (b) the functions of such Aboriginal Community Justice Groups and circle sentencing groups and of members of such groups in connection with the program or assessment for participation in the program,
 - (c) any other matter in respect of which guidelines are permitted or required by this Schedule.
- (2) Without limiting subclause (1), the guidelines may include provisions that:
- (a) apply generally, or
 - (b) apply only in relation to specified persons, courts, groups or other bodies, or
 - (c) apply only in specified circumstances, or
 - (d) do a combination of the things referred to in paragraphs (a), (b) and (c).

Part 8 Disclosure of information in connection with program

24 Evidence of statements generally inadmissible

- (1) Evidence of anything said, or any admission made, in:
- (a) a meeting of a circle sentencing group concerning a referred offender, or

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Amendments

Schedule 1

-
- (b) a meeting of an Aboriginal Community Justice Group held to assess a referred offender's suitability to participate in the program,

is not admissible in any criminal or civil proceedings.

- (2) Subclause (1) does not apply to the criminal proceedings in respect of which a referred offender was referred.

25 Disclosure of information in connection with the program by certain persons prohibited

- (1) Except as provided by subclause (2), a relevant program participant must not disclose any information obtained in connection with:

- (a) the assessment of a referred offender's suitability to participate in the program, or
(b) the conduct of the program or an intervention plan arising out of the program.

Maximum penalty: 20 penalty units.

- (2) Nothing in subclause (1) prevents a relevant program participant from disclosing information:

- (a) in connection with the conduct of an assessment of a referred offender's suitability to participate in the program, or
(b) in connection with the conduct of the program or an intervention plan arising out of the program, or
(c) to a victim of a referred offender about the outcome of a circle sentencing group for the offender, or
(d) for the purposes of any legal proceedings, or
(e) in accordance with a requirement of the *Ombudsman Act 1974* or with any request made by the Ombudsman, or
(f) with other lawful excuse.

Criminal Procedure Amendment (Circle Sentencing Intervention Program)
Regulation 2003

Schedule 1 Amendments

(3) In this clause:

relevant program participant means:

- (a) a member of an Aboriginal Community Justice Group,
or
- (b) a person selected to participate in a circle sentencing
group for a referred offender under clause 11 (1) (f) or
(2) (b), (c) or (d).

Hunter Water (Special Areas) Regulation 2003

under the

Hunter Water Act 1991

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Hunter Water Act 1991*.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Explanatory note

The object of this Regulation is to repeal and remake the *Hunter Water (Special Areas) Regulation 1997* without substantial alteration. That Regulation would otherwise be repealed on 1 September 2003 under section 10 (2) of the *Subordinate Legislation Act 1989*. (It was due to be repealed under that provision on 1 September 2002, but the repeal was postponed for one year by an order made under section 11 (1) of the *Subordinate Legislation Act 1989*.)

The new Regulation makes provision regarding the regulation of activities within areas of land declared to be special areas under the *Hunter Water Act 1991*.

This Regulation is made under the *Hunter Water Act 1991* and, in particular, under sections 55 (Exercise of functions by public bodies in special areas), 57 (Regulations concerning special areas) and 70 (the general regulation-making power).

Hunter Water (Special Areas) Regulation 2003

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Hunter Water (Special Areas) Regulation 2003

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Clause 1 Hunter Water (Special Areas) Regulation 2003

Part 1 Preliminary

Hunter Water (Special Areas) Regulation 2003

Part 1 Preliminary

1 Name of Regulation

This Regulation is the *Hunter Water (Special Areas) Regulation 2003*.

2 Commencement

This Regulation commences on 1 March 2003.

3 Definitions

In this Regulation:

Chichester Catchment Area means the area described in a proclamation under the *Hunter District Water and Sewerage Act 1892* published in Gazette No 153 of 5 December 1924 at page 5461, being the land shown by hatched edging on the map in Schedule 1.

development consent means a development consent in force under the *Environmental Planning and Assessment Act 1979*.

environment protection licence means an environment protection licence in force under the *Protection of the Environment Operations Act 1997*.

Grahamstown Catchment Area means the area described in the following instruments:

- (a) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 98 of 11 October 1963 at pages 2984 and 2985,
- (b) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 112 of 8 November 1963 at pages 3324 and 3325,

being the land shown by hatched edging on the map in Schedule 2 and the land shown by hatched edging on the map in Schedule 6.

Hunter Water (Special Areas) Regulation 2003

Clause 3

Preliminary

Part 1

Nelson Bay Catchment Area means the area described in the following instruments:

- (a) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 2 of 7 January 1949 at pages 10 and 11,
- (b) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 106 of 1 November 1963 at pages 3189 and 3190,
- (c) a proclamation under the *Water Supply Authorities Act 1987* published in Gazette No 159 of 21 October 1988 at page 5485,

being the land shown by hatched edging on the map in Schedule 3.

North Stockton Catchment Area means the area of land described in, and declared to be a special area by, the *Hunter Water (North Stockton Catchment Area) Order 1999* made under section 53 of the Act, being the land shown by hatched edging on the map in Schedule 4.

the Act means the *Hunter Water Act 1991*.

Tomago Sandbeds Catchment Area means the area described in the following instruments:

- (a) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 89 of 11 July 1941 at pages 2482 and 2483,
- (b) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 100 of 28 September 1945 at page 1703,
- (c) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 31 of 21 March 1958 at page 734,
- (d) a proclamation under the *Hunter District Water Sewerage and Drainage Act 1938* published in Gazette No 91 of 25 August 1961 at page 2559,

being the land shown by hatched edging on the map in Schedule 5.

Williams River Catchment Area means the land described in the proclamation referred to in paragraph (b) of the definition of ***Grahamstown Catchment Area***, being the land shown by hatched edging on the map in Schedule 6.

Clause 4 Hunter Water (Special Areas) Regulation 2003

Part 1 Preliminary

4 Application of Regulation

This Regulation applies to the following catchment areas:

- (a) Chichester Catchment Area,
- (b) Grahamstown Catchment Area (including the Williams River Catchment Area),
- (c) Nelson Bay Catchment Area,
- (d) North Stockton Catchment Area,
- (e) Tomago Sandbeds Catchment Area.

Note. The Chichester, Grahamstown (including the Williams River), Nelson Bay and Tomago Sandbeds Catchment Areas are all taken to be special areas by virtue of section 53 (3) of the Act.

5 Notes

Notes in the text of this Regulation do not form part of this Regulation.

Hunter Water (Special Areas) Regulation 2003

Clause 6

Special areas generally

Part 2

Part 2 Special areas generally

6 Application of Part

- (1) This Part applies to the Chichester, Grahamstown, Nelson Bay, North Stockton and Tomago Sandbeds Catchment Areas, but does not apply to the Williams River Catchment Area.
- (2) Despite subclause (1), clause 9 applies to the Williams River Catchment Area.

7 Agriculture

- (1) A person must not engage in any intensive agricultural pursuit in a special area.

Maximum penalty: 100 penalty units in the case of a corporation and 70 penalty units in any other case.

- (2) This clause does not apply to anything that is done in accordance with:
 - (a) an approval given by the Director-General, or
 - (b) a development consent, or
 - (c) an environment protection licence.
- (3) In this clause:

intensive agricultural pursuit means the use of land for agricultural purposes which include market gardening, mushroom growing, fruit growing, flower growing, viticulture, milking in a shed designed for that purpose, aquaculture and intensive animal husbandry, but does not include the use of an animal boarding or training establishment or any cultivation or husbandry carried out mainly for the personal enjoyment or consumption of its produce by the owner or occupier of the land.

intensive animal husbandry means the use of a building or place for the commercial breeding, boarding or nurturing, by a feeding method other than natural grazing, of livestock or poultry.

8 Sewage disposal

The owner or occupier of land in a special area must not erect, install or operate any on-site sewage management facility on the land unless the person concerned does so in accordance with:

- (a) a development consent, or

Clause 8 Hunter Water (Special Areas) Regulation 2003

Part 2 Special areas generally

- (b) an approval granted under the *Local Government Act 1993*, or
- (c) an environment protection licence.

Maximum penalty: 100 penalty units in the case of a corporation and 70 penalty units in any other case.

9 Pollution of waters

- (1) A person must not pollute any waters in a special area.

Maximum penalty: 200 penalty units in the case of a corporation and 100 penalty units in any other case.

- (2) A person does not commit an offence under subclause (1) in respect of anything that is done in accordance with an environment protection licence.

- (3) The Director-General may give a direction for:

- (a) the management or disposal of any substance in a special area that the Director-General considers may detrimentally affect any waters in the Area concerned, or
- (b) the removal of any such substance from a special area or the relocation of the substance to another place in that Area.

- (4) A person given a direction under subclause (3) must comply with it.

Maximum penalty: 100 penalty units in the case of a corporation and 50 penalty units in any other case.

- (5) In this clause:

pollute, in relation to waters, has the same meaning as ***pollution of waters*** has in the *Protection of the Environment Operations Act 1997*, but extends to include disturbing geological or other matter (whether natural or artificial) in such a manner as to change, or to be likely to change, the physical, chemical or biological condition of the waters.

Note. Section 7 of the *Interpretation Act 1987* provides that, if an Act or instrument defines a word or expression, other parts of speech and grammatical forms of the word or expression have corresponding meanings.

waters has the same meaning as it has in the *Protection of the Environment Operations Act 1997*.

Hunter Water (Special Areas) Regulation 2003

Clause 10

Chichester and Grahamstown Catchment Areas

Part 3

Part 3 Chichester and Grahamstown Catchment Areas

10 Application of Part

This Part applies to the Chichester and Grahamstown Catchment Areas, but does not apply to the Williams River Catchment Area.

11 Water activities in the Chichester and Grahamstown Storage Reservoirs

A person must not:

- (a) enter or bathe, swim, fish or use a boat or any other water craft in the Chichester or Grahamstown Storage Reservoirs, or
- (b) allow any other person, or any animal in the person's control, to enter or bathe or swim in either of those reservoirs, or
- (c) allow any other person to fish or use a boat or any other water craft in either of those reservoirs,

otherwise than in accordance with an approval given by the Director-General.

Maximum penalty: 200 penalty units in the case of a corporation and 100 penalty units in any other case.

Clause 12 Hunter Water (Special Areas) Regulation 2003

Part 4 Nelson Bay, North Stockton and Tomago Sandbeds Catchment Areas

Part 4 Nelson Bay, North Stockton and Tomago Sandbeds Catchment Areas

12 Application of Part

This Part applies to the Nelson Bay, North Stockton and Tomago Sandbeds Catchment Areas.

13 Extractive industries

- (1) A person must not engage in any extractive industry in the Nelson Bay, North Stockton or Tomago Sandbeds Catchment Area otherwise than in accordance with an approval given by the Director-General.

Maximum penalty: 200 penalty units in the case of a corporation and 100 penalty units in any other case.

- (2) In this clause:

extractive industry includes mining and any other disturbance of geologic material for the extraction of minerals or other geological constituents.

Hunter Water (Special Areas) Regulation 2003

Clause 14

Williams River Catchment Area

Part 5

Part 5 Williams River Catchment Area

14 Application of Part

This Part applies to the Williams River Catchment Area.

15 Water activities near the Seaham Weir in the Williams River

A person must not:

- (a) use a boat or any other water craft in the Williams River, or
- (b) allow any other person to use a boat or any other water craft in the Williams River,

within 2.5 kilometres upstream, or 0.5 kilometres downstream, of the Seaham Weir, otherwise than in accordance with an approval given by the Director-General.

Maximum penalty: 200 penalty units in the case of a corporation and 100 penalty units in any other case.

Clause 16 Hunter Water (Special Areas) Regulation 2003

Part 6 Miscellaneous

Part 6 Miscellaneous

16 Approvals given by Director-General

- (1) An approval given by the Director-General for the purposes of this Regulation is to be in writing, may be given unconditionally or subject to conditions and may be varied or revoked by the Director-General (by written notice served on the holder of the approval) at any time and for any reason.
- (2) In exercising any function with respect to the giving, variation or revocation of an approval in connection with any special area, the Director-General must have primary regard to the need to prevent water in the special area from becoming polluted or contaminated.

17 Notices by public agencies

For the purposes of section 55 (1) of the Act, the notice to be given to the Director-General:

- (a) must be in writing, and
- (b) must be served on the Director-General, either by post or by lodging it at an office of the Department of Land and Water Conservation, and
- (c) must contain a full description of the function that is intended to be exercised and of any proposed activity associated with the exercise of that function (together with a statement of the objectives of the proposed activity).

18 Repeal and savings

- (1) The *Hunter Water (Special Areas) Regulation 1997* is repealed.
- (2) Any act, matter or thing that, immediately before the repeal of the *Hunter Water (Special Areas) Regulation 1997*, had effect under that Regulation continues to have effect under this Regulation.

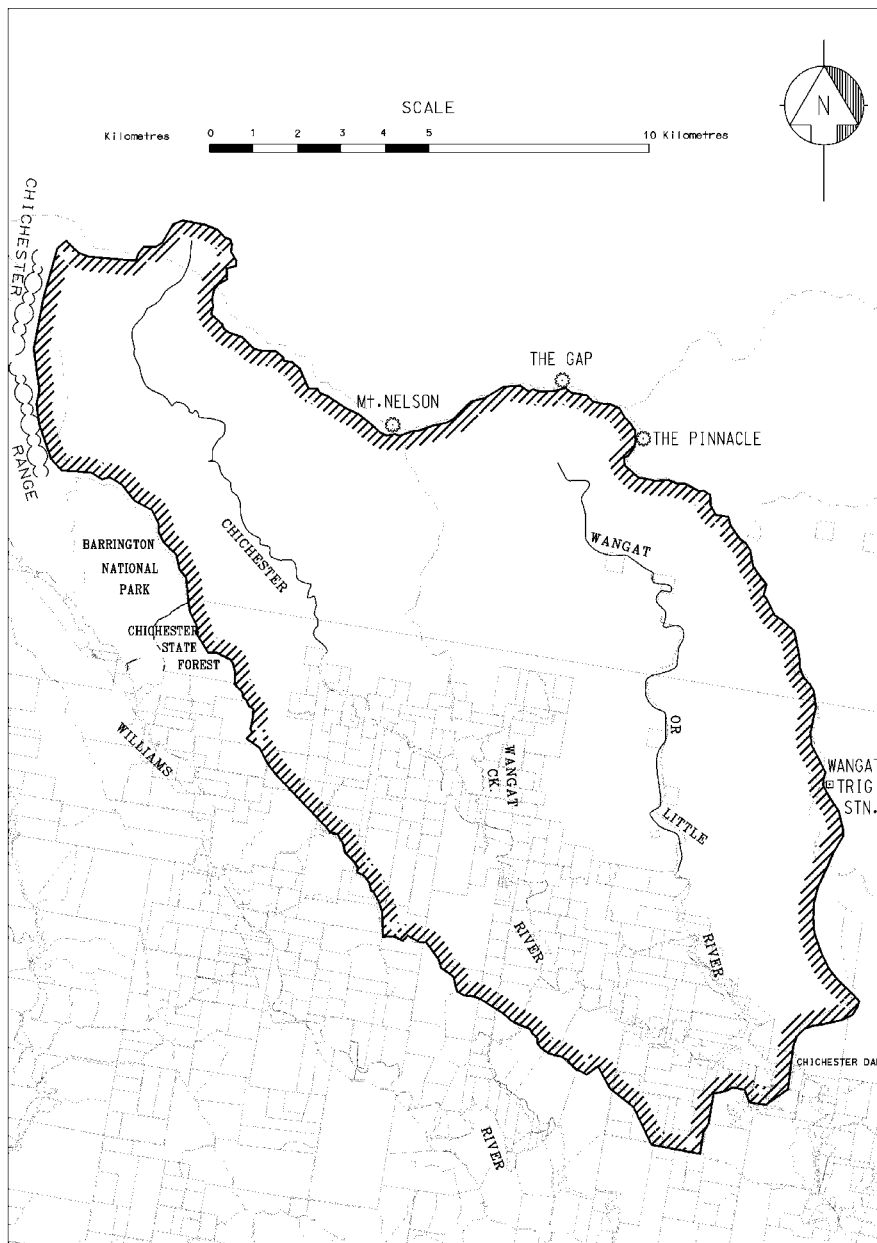
Hunter Water (Special Areas) Regulation 2003

Chichester Catchment Area

Schedule 1

Schedule 1 Chichester Catchment Area

(Clause 3)

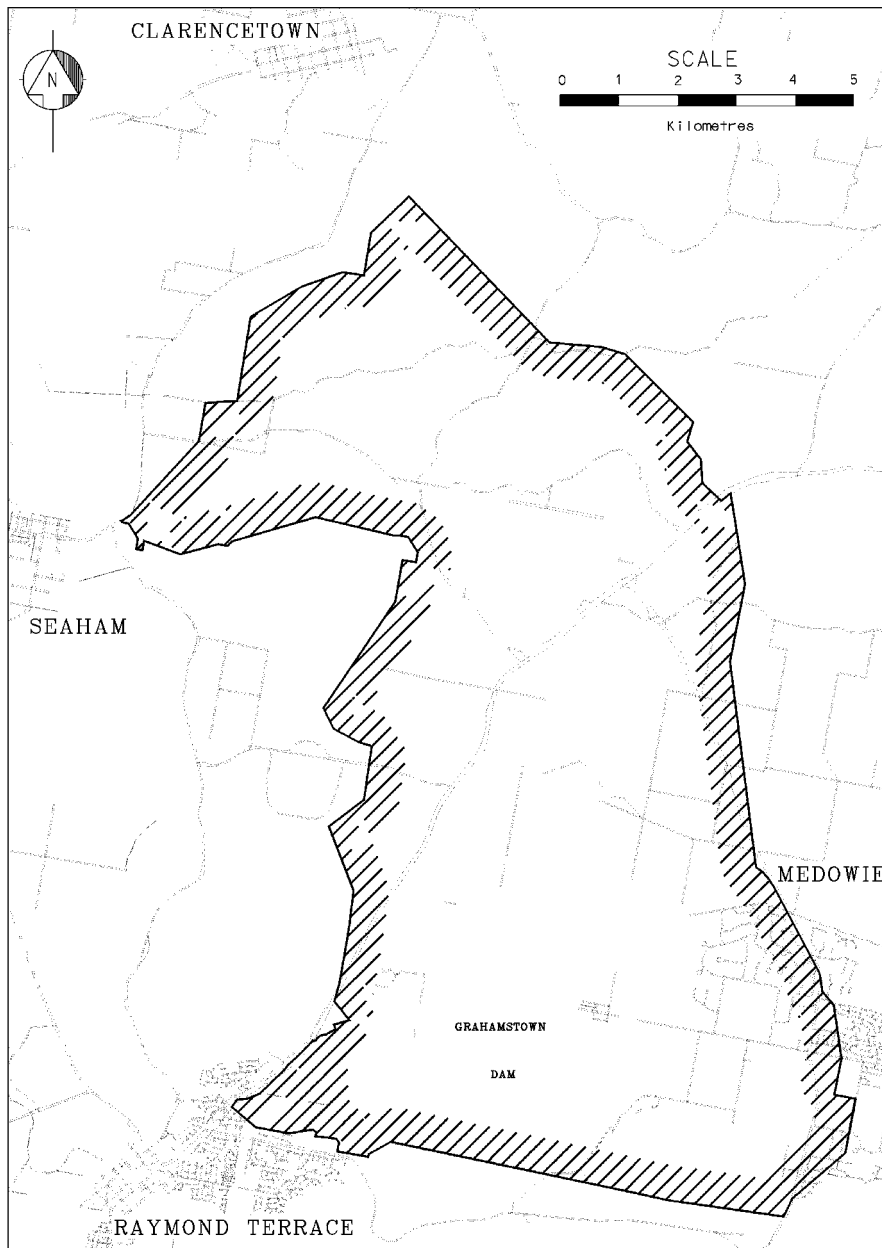


Hunter Water (Special Areas) Regulation 2003

Schedule 2 Grahamstown Catchment Area

Schedule 2 Grahamstown Catchment Area

(Clause 3)



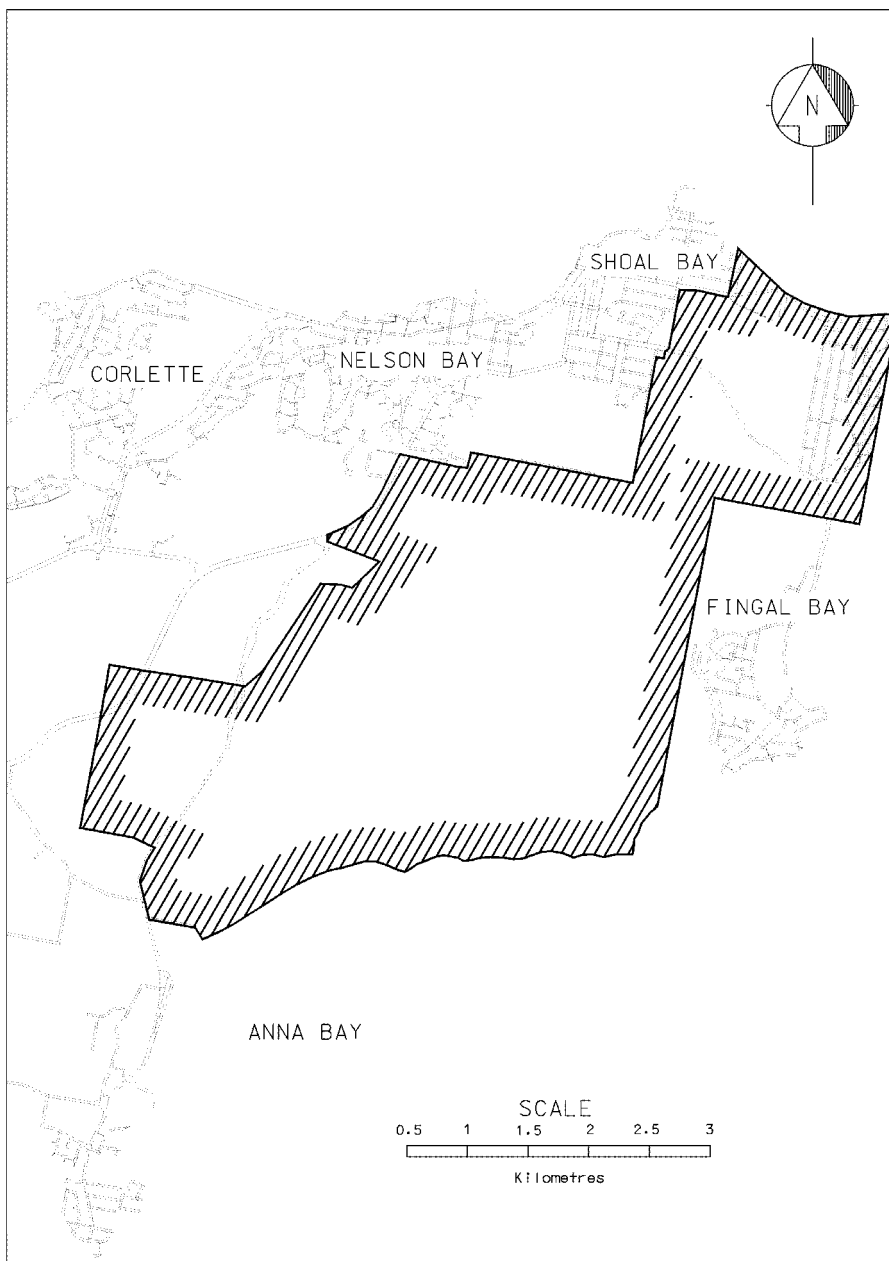
Hunter Water (Special Areas) Regulation 2003

Nelson Bay Catchment Area

Schedule 3

Schedule 3 Nelson Bay Catchment Area

(Clause 3)

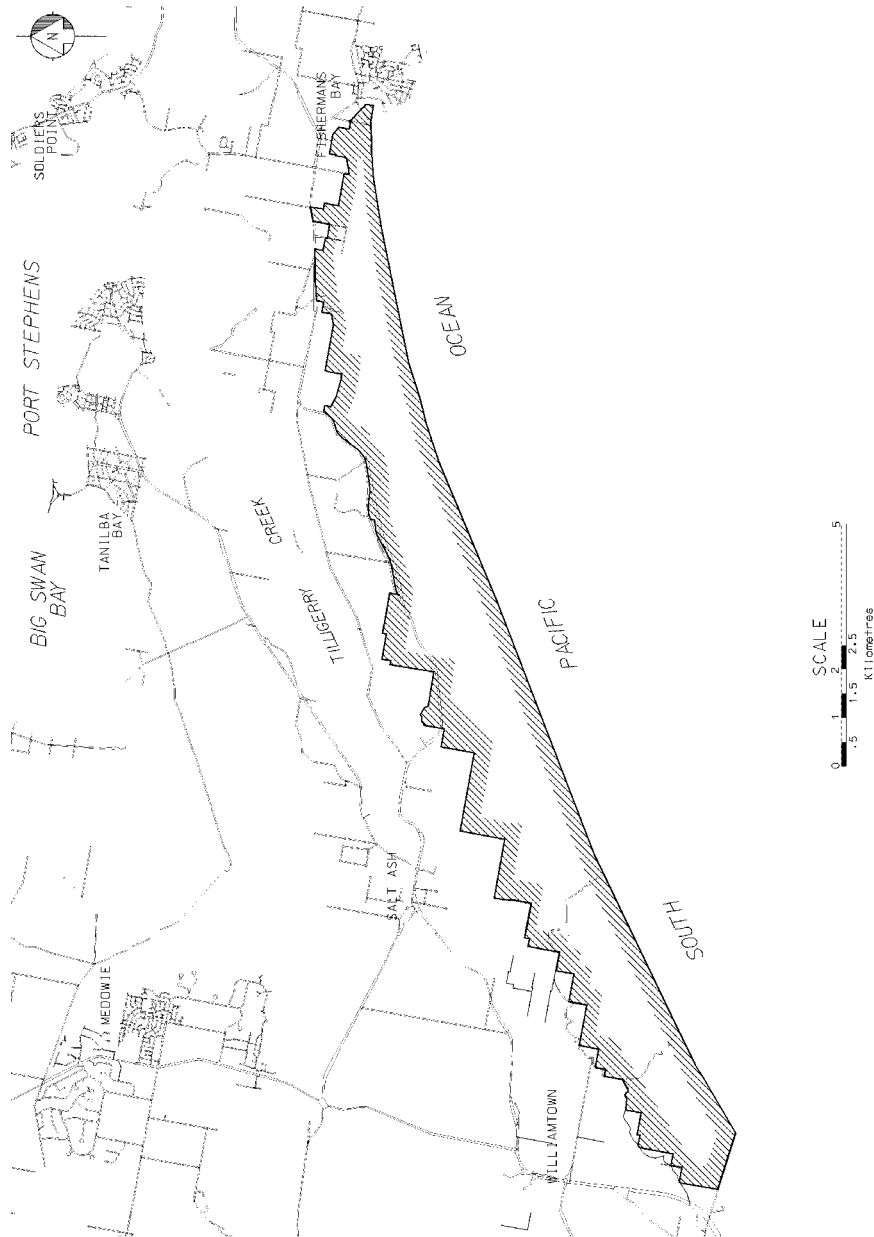


Hunter Water (Special Areas) Regulation 2003

Schedule 4 North Stockton Catchment Area

Schedule 4 North Stockton Catchment Area

(Clause 3)



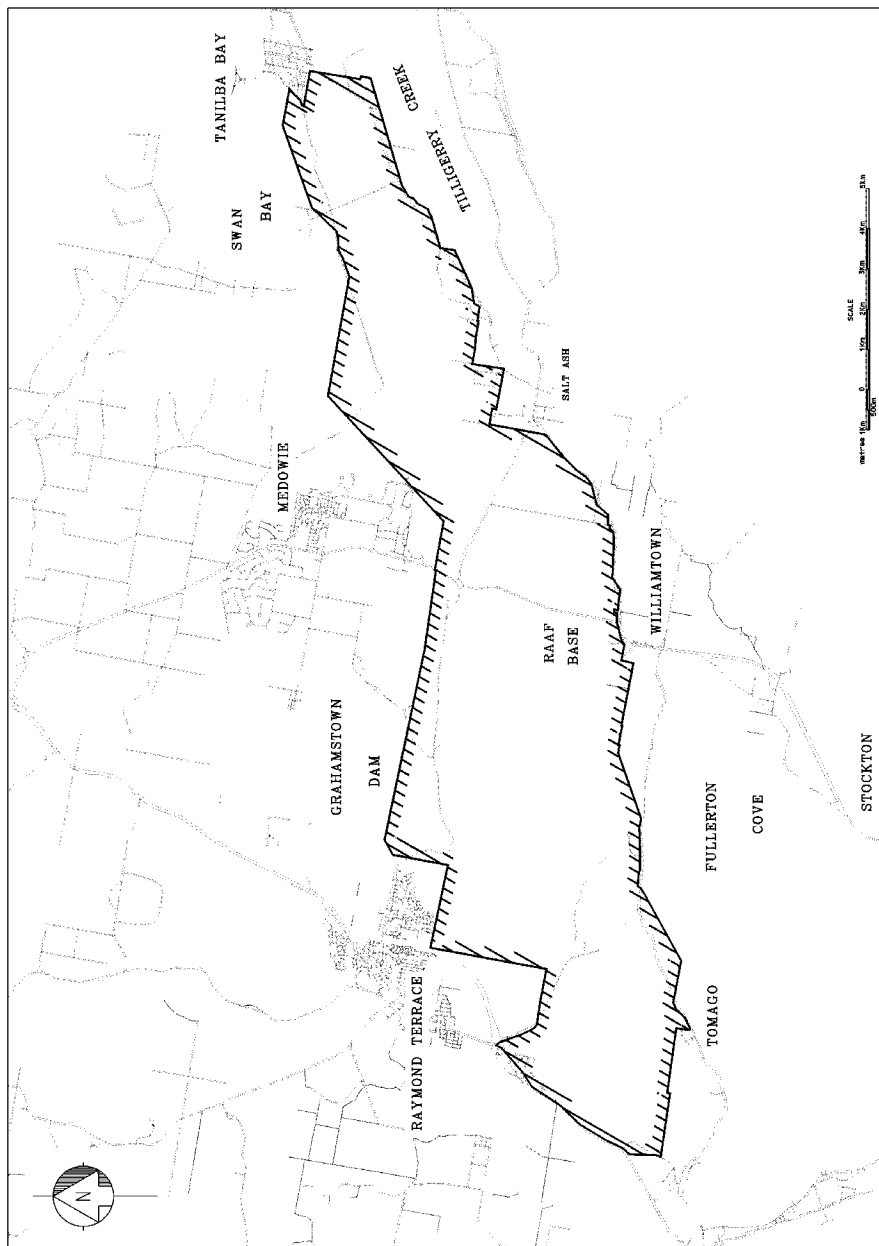
Hunter Water (Special Areas) Regulation 2003

Tomago Sandbeds Catchment Area

Schedule 5

Schedule 5 Tomago Sandbeds Catchment Area

(Clause 3)

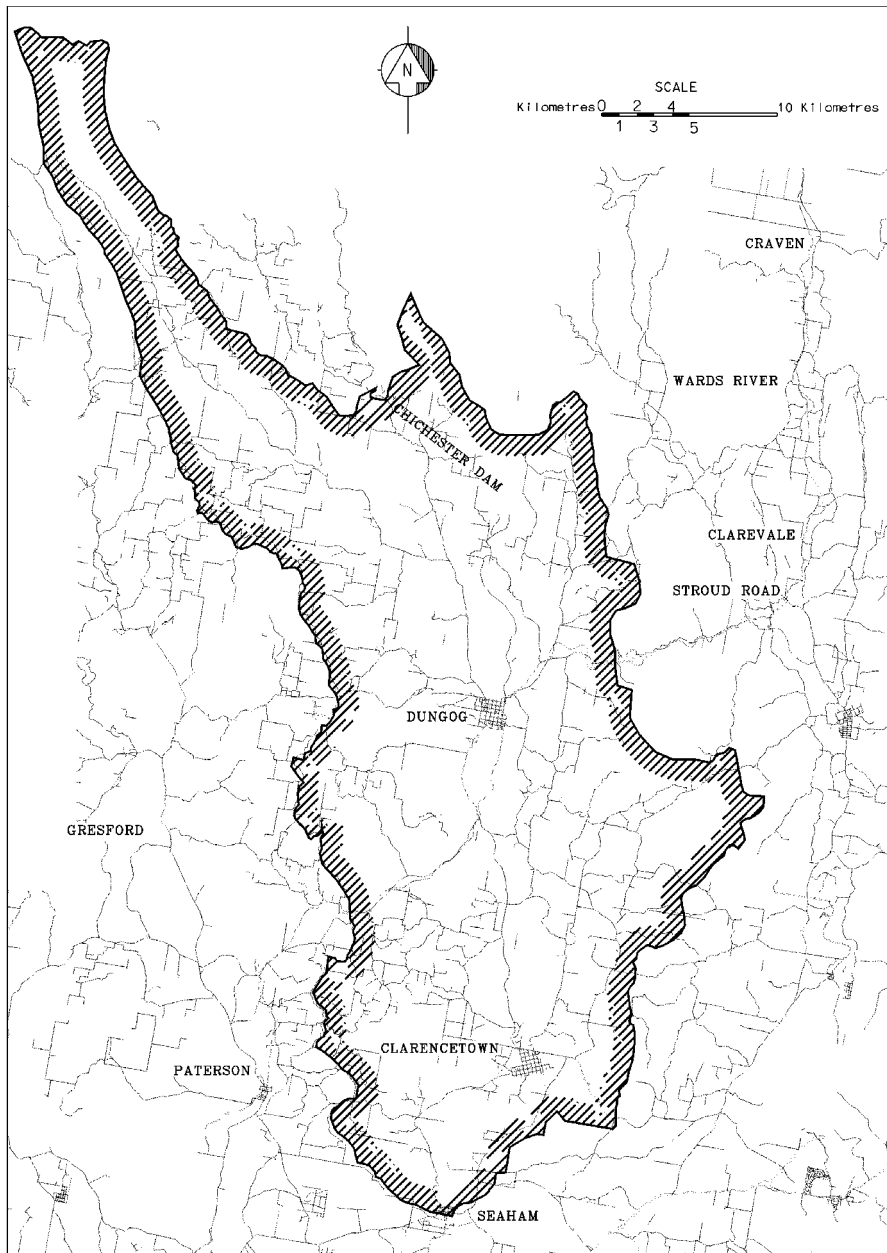


Hunter Water (Special Areas) Regulation 2003

Schedule 6 Williams River Catchment Area

Schedule 6 Williams River Catchment Area

(Clause 3)





New South Wales

Law Enforcement and National Security (Assumed Identities) Amendment Regulation 2002

under the

Law Enforcement and National Security (Assumed Identities) Act 1998

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Law Enforcement and National Security (Assumed Identities) Act 1998*.

MICHAEL COSTA, M.L.C.,
Minister for Police

Explanatory note

The object of this Regulation is to amend the *Law Enforcement and National Security (Assumed Identities) Regulation 1999*:

- (a) to include the Australian Taxation Office as an authorised agency for the purposes of the *Law Enforcement and National Security (Assumed Identities) Act 1998*, and
- (b) to prescribe the Commissioner of Taxation as the Chief Executive Officer of the Australian Taxation Office for the purposes of the Act, and
- (c) to prescribe the National Director Investigation Excise as the office to which the functions under the Act may be delegated in respect of the Australian Taxation Office, and
- (d) to update the prescribed office to which the functions under the Act may be delegated in respect of the Independent Commission Against Corruption, by replacing the office of Director, Investigations with that of an Assistant Commissioner position nominated by the Commissioner for the Independent Commission Against Corruption.

Law Enforcement and National Security (Assumed Identities) Amendment Regulation 2002

Explanatory note

This Regulation is made under the *Law Enforcement and National Security (Assumed Identities) Act 1998* including sections 3, 16 and 19 (the general regulation-making power).

Clause 1 Law Enforcement and National Security (Assumed Identities) Amendment
Regulation 2002

Law Enforcement and National Security (Assumed Identities) Amendment Regulation 2002

under the

Law Enforcement and National Security (Assumed Identities) Act 1998

1 Name of Regulation

This Regulation is the *Law Enforcement and National Security (Assumed Identities) Amendment Regulation 2002*.

2 Amendment of Law Enforcement and National Security (Assumed Identification) Regulation 1999

The *Law Enforcement and National Security (Assumed Identities) Regulation 1999* is amended as set out in Schedule 1.

Law Enforcement and National Security (Assumed Identities) Amendment
Regulation 2002

Schedule 1 Amendments

Schedule 1 Amendments

(Clause 2)

[1] Clause 5 Authorised agencies

Insert after clause 5 (e):

- (f) the Australian Taxation Office.

[2] Clause 5A Chief executive officers of certain authorised agencies

Insert after clause 5A (e):

- (f) in respect of the Australian Taxation Office—the Commissioner of Taxation.

[3] Clause 6 Delegations

Omit “Director, Investigations” from clause 6 (c).

Insert instead “an Assistant Commissioner position nominated by the Commissioner for the Independent Commission Against Corruption”.

[4] Clause 6 (j)

Insert after clause 6 (i):

- (j) in respect of the Australian Taxation Office—the National Director Investigation Excise.



New South Wales

Mental Health Amendment (Victorian Patients) Regulation 2003

under the

Mental Health Act 1990

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Mental Health Act 1990*.

CRAIG KNOWLES, M.P.,
Minister for Health

Explanatory note

The object of this Regulation is to enable, in relation to Victoria:

- (a) the cross border admission and transfer of involuntary mental health patients, and
- (b) the apprehension of absconding interstate involuntary mental health patients (other than forensic patients), and
- (c) the recognition of interstate community treatment orders.

The Regulation complements an agreement between the Ministers for Health for New South Wales and Victoria.

This Regulation is made under the *Mental Health Act 1990*, including sections 286B, 286F, 286H, 286I, 286K, 286N and 302 (the general regulation-making power).

Clause 1 Mental Health Amendment (Victorian Patients) Regulation 2003

Mental Health Amendment (Victorian Patients) Regulation 2003

under the

Mental Health Act 1990

1 Name of Regulation

This Regulation is the *Mental Health Amendment (Victorian Patients) Regulation 2003*.

2 Amendment of Mental Health Regulation 2000

The *Mental Health Regulation 2000* is amended as set out in Schedule 1.

Mental Health Amendment (Victorian Patients) Regulation 2003

Amendments

Schedule 1

Schedule 1 Amendments

(Clause 2)

[1] Clause 38A Definitions

Insert in alphabetical order in clause 38A (1):

authorised psychiatrist means a person appointed as such under section 96 of the *Mental Health Act 1986* of Victoria.

civil interstate apprehension order means a Civil Interstate Apprehension Order issued under the Victorian civil agreement.

forensic interstate apprehension order means an interstate apprehension order issued under the Victorian agreement or the Queensland agreement.

interstate transfer request notice means an Interstate Transfer Request Notice issued under the Victorian civil agreement.

NSW ambulance officer means a person appointed and employed to carry out duties relating to the provision of ambulance services, or appointed to be an honorary ambulance officer, by the Ambulance Service of New South Wales.

NSW police officer means a police officer within the meaning of the *Police Act 1990*.

Victorian hospital means an approved mental health service within the meaning of the *Mental Health Act 1986* of Victoria.

[2] Clause 38A (1), definition of “interstate agreement”

Insert after paragraph (b):

- (c) the agreement dated 19 August 2002 made between the Minister and the Minister for Health for Victoria (the *Victorian civil agreement*).

[3] Clause 38A (1), definition of “interstate apprehension order”

Omit the definition. Insert instead:

interstate apprehension order means a civil interstate apprehension order or a forensic interstate apprehension order.

Mental Health Amendment (Victorian Patients) Regulation 2003

Schedule 1 Amendments

[4] Clause 38A (1), definition of “relevant corresponding law”

Insert “, the Victorian civil agreement” after “Victorian agreement” in paragraph (a).

[5] Clause 38D Apprehension of patients and persons under interstate apprehension orders

Insert “or other person” after “interstate patient” wherever occurring.

[6] Clause 38D (1) (a)

Insert “or other person” after “the patient”.

[7] Clause 38D (1) (b)

Insert “in the case of a forensic interstate apprehension order,” before “a person”.

[8] Clause 38D (1) (c)

Insert after clause 38D (1) (b):

- (c) in the case of a civil interstate apprehension order, a person who is authorised to apprehend a patient or other person under section 76 or 139 of the Act.

[9] Clause 38D (2) (a) and (b)

Insert “or person” after “the patient” wherever occurring.

[10] Clause 38D (2) (b) (i)

Insert “or person subject to a civil interstate apprehension order” after “Victorian patient”.

[11] Part 7A, Divisions 3–5

Insert after Division 2:

Division 3 Transfer of patients and persons from this State**38E Admission of persons to hospitals in Victoria**

- (1) For the purposes of section 286F (2) (b) of the Act, the following persons are authorised to take a person to a Victorian hospital:

Mental Health Amendment (Victorian Patients) Regulation 2003

Amendments

Schedule 1

-
- (a) the medical superintendent of a hospital in this State or a person authorised by the medical superintendent,
 - (b) a NSW police officer,
 - (c) a NSW ambulance officer.
- (2) For the purposes of section 286F of the Act, a Victorian hospital is a hospital to which a person may be taken.
- Note.** Under section 286F (2) of the Act, a person who is authorised under a corresponding law (that is, the *Mental Health Act 1986* of Victoria) may also take a person to a hospital in Victoria.

38F Transfer of patients from this State to Victoria

- (1) For the purposes of section 286H (3) of the Act, the following persons are authorised to take a patient from a hospital in this State to a Victorian hospital:
- (a) the medical superintendent of a hospital in this State or a person authorised by the medical superintendent,
 - (b) a NSW police officer,
 - (c) a NSW ambulance officer.
- (2) For the purposes of section 286H (4) (a) and (b) of the Act, the medical superintendent of a hospital in this State that is transferring a person, involuntarily detained as a temporary patient or a continuing treatment patient, to a Victorian hospital must:
- (a) before transferring the person:
 - (i) provide the Victorian hospital with a completed interstate transfer request notice in the form specified in the Victorian civil agreement, and
 - (ii) ensure that the transfer has been approved in writing by the authorised psychiatrist (or that person's delegate) of the Victorian hospital, and
 - (b) forward to the authorised psychiatrist of the Victorian hospital an order in writing in an approved form authorising the transfer and any other information (including medical records) that the superintendent considers to be reasonably necessary for the continued care and treatment of the person.

Mental Health Amendment (Victorian Patients) Regulation 2003

Schedule 1 Amendments

-
- (3) For the purposes of section 286H of the Act, a Victorian hospital is a hospital to which a patient may be taken.

Note. Under section 286H (3) of the Act, a person who is authorised under a corresponding law (that is, the *Mental Health Act 1986* of Victoria) may also take a patient to a hospital in Victoria.

Division 4 Transfer of persons to this State

38G Admission of Victorians to hospitals in this State

- (1) For the purposes of section 286I (2) (b) of the Act, the following persons are authorised to take a person to a hospital in this State from Victoria:

- (a) the medical superintendent of a hospital in this State or a person authorised by the medical superintendent,
- (b) a NSW police officer,
- (c) a NSW ambulance officer.

- (2) For the purposes of section 286I of the Act, premises the subject of an order in force under section 208 of the Act by which the premises are declared to be a hospital, is a hospital to which a person may be taken.

Note. Under section 286I (2) of the Act, a person who is authorised under a corresponding law (that is, the *Mental Health Act 1986* of Victoria) may also take a person to a hospital in this State from Victoria.

38H Transfer of Victorians to hospitals in this State

- (1) For the purposes of section 286K (2) of the Act, the following persons are authorised to take a patient from a Victorian hospital to a hospital in this State:

- (a) the medical superintendent of a hospital in this State or a person authorised by the medical superintendent,
- (b) a NSW police officer,
- (c) a NSW ambulance officer.

- (2) For the purposes of section 286K (4) (a) of the Act, a person detained as an involuntary patient under the *Mental Health Act 1986* of Victoria must not be transferred from a Victorian hospital to a hospital in this State unless:

- (a) before transferring the person:
 - (i) the authorised psychiatrist of the Victorian hospital provides the medical superintendent of

Mental Health Amendment (Victorian Patients) Regulation 2003

Amendments

Schedule 1

-
- the hospital in this State with a completed interstate transfer request notice in the form specified in the Victorian civil agreement, and
- (ii) the transfer is approved in writing by the medical superintendent of the hospital in this State, and
- (b) the authorised psychiatrist of the Victorian hospital provides a copy of the transfer order made under section 93G of the *Mental Health Act 1986* of Victoria and any other information (including medical records) that the psychiatrist considers to be reasonably necessary for the continued care and treatment of the person.

Note. Under section 286K (2) of the Act, a person who is authorised under a corresponding law (that is, the *Mental Health Act 1986* of Victoria) may also take a patient to a hospital in this State from a Victorian hospital.

Division 5 Community treatment orders**38I Victorian community treatment orders relating to New South Wales residents**

- (1) A community treatment order made under section 14 of the *Mental Health Act 1986* of Victoria is declared to be an interstate community treatment order for the purposes of Chapter 10A of the Act.
- (2) For the purposes of section 286N of the Act, an approved mental health service within the meaning of the *Mental Health Act 1986* of Victoria is an interstate health care agency.
- (3) For the purposes of section 286N (2) (b) of the Act, a person must not administer electro convulsive therapy for the purposes of implementing an interstate community treatment order.



Water Management (Water Supply Authorities—Finance) Amendment (Water Restrictions) Regulation 2003

under the

Water Management Act 2000

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Water Management Act 2000*.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Explanatory note

The object of this Regulation is to amend clause 47 of the *Water Management (Water Supply Authorities—Finance) Regulation 1996* to provide that a water supply authority may restrict the supply of water (as an alternative to cutting off that supply) in the circumstances set out in that clause, including where it is necessary to conserve water supplies in times of drought or other scarcity.

This Regulation is made under the *Water Management Act 2000*, including sections 322 and 400 (the general regulation-making power).

Clause 1 Water Management (Water Supply Authorities—Finance) Amendment
(Water Restrictions) Regulation 2003

Water Management (Water Supply Authorities— Finance) Amendment (Water Restrictions) Regulation 2003

under the

Water Management Act 2000

1 Name of Regulation

This Regulation is the *Water Management (Water Supply Authorities—Finance) Amendment (Water Restrictions) Regulation 2003*.

2 Amendment of Water Management (Water Supply Authorities— Finance) Regulation 1996

The *Water Management (Water Supply Authorities—Finance) Regulation 1996* is amended as set out in Schedule 1.

Water Management (Water Supply Authorities—Finance) Amendment
(Water Restrictions) Regulation 2003

Amendment

Schedule 1

Schedule 1 Amendment

(Clause 2)

Clause 47 Cutting off or restricting supply of water

Insert “or restrict” after “cut off”.



New South Wales

Weapons Prohibition Amendment (Sheriff's Officers) Regulation 2003

under the

Weapons Prohibition Act 1998

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Weapons Prohibition Act 1998*.

MICHAEL COSTA, M.L.C.,
Minister for Police

Explanatory note

The object of this Regulation is to exempt Sheriff's officers acting in the course of their employment from the requirement to have a permit under the *Weapons Prohibition Act 1998* to carry and use oleoresin capsicum spray.

This Regulation is made under the *Weapons Prohibition Act 1998*, including section 6 and section 50 (the general regulation-making power).

Clause 1 Weapons Prohibition Amendment (Sheriff's Officers) Regulation 2003

Weapons Prohibition Amendment (Sheriff's Officers) Regulation 2003

under the

Weapons Prohibition Act 1998

1 Name of Regulation

This Regulation is the *Weapons Prohibition Amendment (Sheriff's Officers) Regulation 2003*.

2 Amendment of Weapons Prohibition Regulation 1999

The *Weapons Prohibition Regulation 1999* is amended as set out in Schedule 1.

Weapons Prohibition Amendment (Sheriff's Officers) Regulation 2003

Amendment

Schedule 1

Schedule 1 Amendment

(Clause 2)

Schedule 1 Persons exempt from requirement for permit

Insert after clause 3:

3A Possession and use of capsicum spray by Sheriff's officers

- (1) A Sheriff's officer is exempt from the requirement under the Act for a permit to possess or use a prohibited weapon referred to in clause 2 (22) (d) of Schedule 1 to the Act, but only when acting in the course of employment as a Sheriff's officer, and only if the Commissioner is satisfied that the officer has been trained in the use of the prohibited weapon in a manner approved by the Commissioner.
- (2) It is a condition of the exemption referred to in this clause that the person to whom the exemption relates must store or keep the prohibited weapon concerned in a safe and secure manner when it is not being used.
- (3) The failure to comply with the condition under subclause (2) is an offence.

Maximum penalty: 50 penalty units.

Workers Compensation (General) Amendment (Meat Workers) Regulation 2003

under the

Workers Compensation Act 1987

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the *Workers Compensation Act 1987*.

JOHN DELLA BOSCA, M.L.C.,
Special Minister of State

Explanatory note

The object of this Regulation is to amend clause 11 of the *Workers Compensation (General) Regulation 1995* (which provides for the determination of current weekly wage rates for the purposes of weekly payments of compensation to certain injured meat industry workers):

- (a) to apply the clause only to workers in the meat processing industry who are paid “overs” or a production loading, and to remove references to specific industrial awards and agreements from the clause, and
- (b) to make it clear (for new and existing claims) that in calculating an injured worker’s current weekly wage rate any amount that the worker would be entitled to be paid in respect of “overs” or production loading is to be included (capped at 31.25% above the base rate as at present), and
- (c) to provide that any higher special sickness or injury weekly rate that may be payable to an injured worker under an industrial instrument is to be the worker’s current weekly wage rate for the purposes of weekly payments of compensation.

Workers Compensation (General) Amendment (Meat Workers) Regulation 2003

Explanatory note

This Regulation is made under the *Workers Compensation Act 1987*, including section 42 and section 280 (the general regulation-making power).

Workers Compensation (General) Amendment (Meat Workers)
Regulation 2003

Clause 1

Workers Compensation (General) Amendment (Meat Workers) Regulation 2003

1 Name of Regulation

This Regulation is the *Workers Compensation (General) Amendment (Meat Workers) Regulation 2003*.

2 Amendment of Workers Compensation (General) Regulation 1995

The *Workers Compensation (General) Regulation 1995* is amended as set out in Schedule 1.

Workers Compensation (General) Amendment (Meat Workers)
Regulation 2003

Schedule 1 Amendments

Schedule 1 Amendments

(Clause 2)

[1] Clause 11 Sec 42 (1) (c), (5) (b): prescribed classes of workers etc—certain meat industry workers

Omit clause 11 (1). Insert instead:

- (1) Workers engaged in the meat processing industry whose employment is subject to an industrial instrument that provides for the payment of “overs” or a production loading under a tally, piecework or incentive system in respect of work performed in that industry are prescribed as a class of workers for the purposes of section 42 (1) (c) and (5) (b) of the Act.

(1A) In this clause:

industrial instrument means a State industrial instrument or an instrument of a similar nature under the law of another State, a Territory or the Commonwealth, and includes any agreement or other arrangement in force under such an instrument.

[2] Clause 11 (2)

Omit “each worker of a class”. Insert instead “each worker of the class”.

[3] Clause 11 (2) (a)

Omit “paragraphs (b) and (c)”. Insert instead “paragraphs (b), (c) and (d)”.

[4] Clause 11 (2) (b)

Omit “(being a worker of any one of the classes prescribed by subclause (1) (a)—(l))”.

Insert instead “(being a worker whose employment is subject to an industrial instrument that provides for the payment of “overs” to the worker)”.

Workers Compensation (General) Amendment (Meat Workers)
Regulation 2003

Amendments

Schedule 1

[5] Clause 11 (2) (d)

Insert at the end of clause 11 (2) (c):

, or

- (d) where the formula prescribed by whichever of paragraphs (a), (b) and (c) is appropriate provides a smaller rate for a particular week for the worker than any special rate (as referred to in subclause (2A)) applicable to the worker for that week—the special rate applicable to the worker for that week.

[6] Clause 11 (2A)

Insert after clause 11 (2):

- (2A) A reference in subclause (2) (d) to a *special rate* applicable to a worker for a particular week is a reference to a special weekly wage rate that is applicable to the worker under an industrial instrument for any period for which the worker is absent from work because of sickness or injury.

[7] Clause 11 (3)

Omit “a worker of any one of the classes”.
Insert instead “a worker of the class”.

[8] Clause 11 (3)

Omit “any other worker of that class” wherever occurring.
Insert instead “any other worker who is a co-worker of the injured worker”.

[9] Clause 11 (3)

Omit “other workers of that class” wherever occurring.
Insert instead “other co-workers of the injured worker”.

[10] Clause 11 (3)

Omit the matter that provides for what *C* equals. Insert instead:

C equals the weekly rate applicable under any relevant industrial instrument to co-workers of the injured worker.

Workers Compensation (General) Amendment (Meat Workers)
Regulation 2003

Schedule 1 Amendments

weekly rate (in relation to what *C* equals) is the amount of the rate fixed or set under an industrial instrument in respect of co-workers of the injured worker as the tally rate per 5 days, ordinary rate per 5 days, ordinary weekly rate or minimum weekly rate of pay.

[11] Clause 11 (3A)

Insert after clause 11 (3):

- (3A) For the purposes of subclause (3), a worker is a *co-worker* of an injured worker if the worker is normally employed with the injured worker at a common place of employment and under the same classification as the injured worker.

[12] Clause 11 (4) and (5)

Omit the subclauses. Insert instead:

- (4) A reference in subclause (3) to the prescribed amount payable to a worker for a day on which the worker worked is a reference to the amount of money that the worker is entitled, under the industrial instrument by which the worker is bound, to be paid for that day's work:
- (a) exclusive of any amount that the worker is so entitled to be paid in respect of shift work or overtime or otherwise at penalty rates, and
 - (b) inclusive of any amount that the worker is so entitled to be paid in respect of "overs" or (subject to subclause (5)) in respect of production loading.
- (5) For the purposes only of subclause (4) (b), an amount a worker is entitled to be paid in respect of production loading for a day's work is taken not to include:
- (a) in the case of a worker for whom production loading is calculated by reference to weekly production, any amount in excess of one fifth of the production loading that would be payable to the worker in respect of the week in which that day occurs if the workers (in relation to whose "overs" that production loading is calculated)

Workers Compensation (General) Amendment (Meat Workers)
Regulation 2003

Amendments

Schedule 1

-
- completed during that week a number of “overs” that provided each of those workers with pay for that week that is equivalent to the amount of money calculated in accordance with the formula $C \times 21/16$, or
- (b) in the case of a worker for whom production loading is calculated by reference to daily production, any amount in excess of the production loading that would be payable to the worker in respect of that day if the workers (in relation to whose “overs” that production loading is calculated) completed during that day a number of “overs” that provided each of those workers with pay for that day that is equivalent to the amount of money calculated in accordance with the formula $C/5 \times 21/16$,
- in each case with C having the value ascribed to it in subclause (3).

Rules

TOTALIZATOR ACT 1997 TAB LIMITED SPORTS BETTING RULES AMENDMENTS

In accordance with the provisions of section 54(1) of the Totalizator Act 1997, the Minister for Gaming and Racing has approved of the following amendments to the TAB Limited Sports Betting Rules:

AMENDMENT OF RULE 3.1.2

Rule 3.1.2 is amended by deleting the words “absolute discretion” and substituting “sole and absolute discretion”.

AMENDMENT OF RULE 3.1.6

Rule 3.1.6 is amended by deleting the words “sole discretion” and substituting “sole and absolute discretion”.

REPLACEMENT OF RULE 3.1.7

Rule 3.1.7 is deleted and replaced by a new rule in the following terms:

“3.1.7 TAB may refuse or decline to accept any sports bet at its sole and absolute discretion and for any reason whatsoever. TAB is not required to state or provide any reasons for refusing or declining to accept any sports bet.”.

REPLACEMENT OF RULE 3.1.8

Rule 3.1.8 is deleted and replaced by a new rule in the following terms:

“3.1.8 Currency of display

TAB will use its best endeavours to ensure the currency of the display of all:

- (a) markets on which TAB is conducting sports betting; and
- (b) odds quoted on outcomes or contingencies in those markets on which TAB is conducting sports bets,

but is not liable for any errors or omissions or the exercise of a discretion under clause 4.4.4(c).”.

NEW RULE 3.1.9

Immediately after Rule 3.1.8, a new Rule 3.1.9 is inserted in the following terms:

“3.1.9 Refunds

Except as specifically and expressly provided in these Rules or required by law, no customer is entitled to any refund of or in respect of any amount of any sports bet. This clause does not prevent TAB, in its sole and absolute discretion, refunding in whole or in part the amount of any sports bet but any such refund or other payment which TAB, in its sole and absolute discretion, elects to make will be without prejudice and will not be binding on TAB or create any precedent or entitlement in any other person or entitlement in respect of the same customer in respect of any other bet.”.

AMENDMENT OF RULE 4.1

Rule 4.1 is deleted and replaced by a new rule in the following terms:

“4.1 Determination of Events Covered

TAB may, in its sole and absolute discretion, determine the sports betting events upon which TAB conducts sports betting and the forms of sports bets which TAB offers on a sports betting event on which TAB conducts sports betting”.

NEW RULE 4.4

Immediately after Rule 4.3, a new Rule 4.4 is inserted in the following terms:

“4.4 No Requirement to Quote on all Potential Outcomes or Contingencies

- 4.4.1 TAB may, in its sole and absolute discretion, determine the outcomes or contingencies within a sports betting event or a form of sports betting on a sports betting event on which TAB will accept sports bets or quote odds (including, without limitation, whether an Outcomes Not Quoted selection is offered).
- 4.4.2 TAB is not required to accept sports bets or quote odds on all potential outcomes or contingencies within a sports betting event or a form of betting on a sports betting event.
- 4.4.3 TAB may, in its sole and absolute discretion, elect to accept sports bets or quote odds on only some of the potential outcomes or contingencies within a sports betting event or a form of betting on a sports betting event. All sports bets stand regardless of whether or not, at the time the relevant sports bet was made or at any prior or subsequent time, TAB accepted, or was prepared to accept, bets or quoted odds on the outcome or contingency which ultimately occurred.
- 4.4.4 If TAB elects not to list (either specifically or by inclusion within an Outcomes Not Quoted selection) all potential outcomes or contingencies within a form of betting on a sports betting event, TAB must clearly and specifically state on betting lists and odds display screens that outcomes or contingencies not listed may be successful.
- 4.4.5 TAB may, in its absolute and sole discretion, at any time prior to the close of betting and without notification or reason:
 - (a) elect not to accept sports bets or cease to quote, or suspend quotation of, odds on a particular outcome or contingency in a sports betting event or a form of betting on a sports betting event;
 - (b) commence or resume accepting sports bets or quoting odds on a particular outcome or contingency in a sports betting event or a form of betting on a sports betting event; and
 - (c) accept a sports bet on a particular outcome or contingency in a sports betting event or a form of betting on a sports betting event notwithstanding that TAB was not at the relevant time quoting odds on that outcome or contingency.”.

AMENDMENT OF RULE 5.1.1

Rule 5.1.1 is deleted and replaced by a new rule in the following terms:

“5.1.1 All-in basis

All sports bets are made on an All-in basis except where:

- (a) clause 5.2.3.7 expressly provides otherwise;
- (b) some other basis is expressly and specifically agreed between a duly authorised TAB Sports Betting Officer and the customer at the time of making the relevant sports bet; or
- (c) an additional proviso applied by TAB to the relevant sports bet in accordance with clause 1.6 expressly and specifically provides that the sports bet is not made on an All-in basis.”

AMENDMENT OF RULE 5.1.4

Rule 5.1.4 is amended by deleting the words “absolute discretion” and substituting “sole and absolute discretion”.

AMENDMENT OF RULE 6.2

Rule 6.2 is deleted and replaced by a new rule in the following terms:

“6.2 Disclaimer

TAB is not, except as otherwise expressly and specifically provided in these Rules or required by law, liable to any person (including without limitation for any loss or damage suffered or claimed to have been suffered by a person) as a result of, or in any way arising out of or as a consequence of any of the following:

- a) Inability to place or cancel a sports bet on any sports betting event or form of betting on a sports betting event.
- b) Inability to place or cancel a sports bet on a particular outcome or contingency on any sports betting event or form of betting on a sports betting event.
- c) The loss of a sports betting ticket.
- d) Any decision of the recognised governing body of the sport or any referee or other official appointed to administer, supervise, referee or control a sports betting event (including without limitation any decision to impose, or not to impose, penalties or sanctions and the nature and extent of any such sanctions).
- e) Any subsequent change to the result of a sports betting event after a result has been declared by the recognised governing body of that sport in accordance with clause 5.1.11.
- f) Any odds quoted by any source other than authorised staff of TAB or any quoted odds which are no longer valid for betting purposes.
- g) The failure, exclusion or refusal of any competitor, team or member of a team to start or complete a sports betting event.
- h) The refusal or inability of TAB, its agents or assigns to accept all or part of a sports bet or to accept sports bets on a particular outcome or contingency on any sports betting event or form of betting on a sports betting event.
- i) The exercise by TAB of any discretion conferred on TAB under these Rules or the manner in which that discretion is exercised either generally or in particular circumstances.”

Orders



Health Services Amendment (Hearing NSW) Order 2003

under the

Health Services Act 1997

JAMES JACOB SPIGELMAN,
By Deputation from Her Excellency the Governor

I, the Honourable James Jacob Spigelman, Lieutenant-Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 42 of the *Health Services Act 1997*, make the following Order.

Dated, this 19th day of February 2003.

By His Excellency's Command,

CRAIG KNOWLES, M.P.,
Minister for Health

Explanatory note

The object of this Order is to amend Schedule 2 to the *Health Services Act 1997* to include Hearing NSW as a statutory health corporation.

Clause 1 Health Services Amendment (Hearing NSW) Order 2003

Health Services Amendment (Hearing NSW) Order 2003

under the

Health Services Act 1997

1 Name of Order

This Order is the *Health Services Amendment (Hearing NSW) Order 2003*.

2 Commencement

This Order commences on 1 July 2003.

3 Amendment of Health Services Act 1997

Schedule 2 to the *Health Services Act 1997* is amended by inserting “Hearing NSW” at the end of the Schedule.

Public Sector Employment and Management (Minister for Public Works) Order 2003

under the

Public Sector Employment and Management Act 2002

JAMES JACOB SPIGELMAN,
By Deputation from Her Excellency the Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 108 of the *Public Sector Employment and Management Act 2002*, make the following Order.

Dated, this 12th day of February 2003.

By Her Excellency's Command,

BOB CARR, M.P.,
Premier

Clause 1 Public Sector Employment and Management (Minister for Public Works)
Order 2003

Public Sector Employment and Management (Minister for Public Works) Order 2003

1 Name of Order

This Order is the *Public Sector Employment and Management (Minister for Public Works) Order 2003*.

2 Construction of certain reference to Minister for Public Works

The reference to the Minister for Public Works in paragraph (b) of the definition of *Constructing Authority* in section 22A of the *Rivers and Foreshores Improvement Act 1948* is to be construed as a reference to the Minister for Land and Water Conservation.

OFFICIAL NOTICES

Appointments

2003 Lord Howe Island Board Election

PURSUANT to clause 50(b) of the Lord Howe Island (Elections) Regulation, 1999, I declare the following persons duly elected to the Lord Howe Island Board, following the declaration of the poll on Thursday, 13 February 2003.

Esven FENTON
Bruce McFADYEN
Gower WILSON

J. WASSON,
Electoral Commissioner

PLANT DISEASES ACT 1924

Appointment of Inspectors

I, RICHARD FREDERICK SHELDRAKE, Director-General of the Department of Agriculture, pursuant to section 11(1) of the Plant Diseases Act 1924 ("the Act") appoint the persons named in the Schedule as inspectors under the Act:

—————
Schedule

EDWARD BIEL,
BRIAN HARVEY CLEAVER,
ANTHONY JAMES CARBONE,
JOSEPH RAYMOND WRIGHT AND
DAVID WAYNE VALLANCE.

Dated this 13th day of February 2003.

R. F. SHELDRAKE,
Director-General

ERRATUM

THE notice relating to the appointment of ROBERT EDWARD KENNEDY as an acting Inspector of Electrical Engineering that appeared in the *Government Gazette* of 14 February 2003, Folio 1645 should read as an appointment as follows, not which appeared.

COAL MINES REGULATION ACT 1982 /

MINES INSPECTION ACT 1901

Appointment of Acting Inspector
Department of Mineral Resources

HER Excellency, Professor Marie Bashir, AC, Governor of New South Wales, with the advice of the Executive Council, pursuant to the provisions of section 7(1)(f) of the Coal Mines Regulation Act 1982 and Section 32(1) of the Mines Inspection Act 1901, has appointed ROBERT ALEXANDER KENNEDY as an acting Inspector of Electrical Engineering for a 12 month term commencing from 6 February 2003.

The Hon EDWARD OBEID, OAM, M.L.C.,
Minister for Mineral Resources
Minister for Fisheries

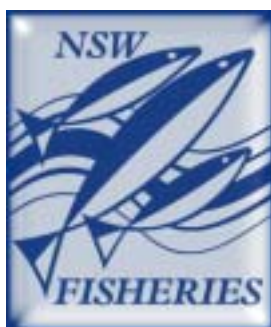
NSW Fisheries

Fishery Management Strategy

for the

Ocean Hauling Fishery

February 2003





Fishery Management Strategy for the Ocean Hauling Fishery

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The Fishery Management Strategy for the Ocean Hauling Fishery will be updated from time to time. Amendments will be made available on the NSW Fisheries website: www.fisheries.nsw.gov.au.

Cover by J Mathews

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ABBREVIATIONS

ACCF	Advisory Council on Commercial Fishing
ACFC	Advisory Council on Fisheries Conservation
ACRF	Advisory Council on Recreational Fishing
ADT	Administrative Decisions Tribunal
AFMA	Australian Fisheries Management Authority
AOIS	Australian Quarantine and Inspection Service
CAMBA	Agreement between Australia and the People's Republic of China for protection of Migratory Birds and their Environment
COE	Certificate of Exemption
CPUE	Catch Per Unit Effort
DLWC	Department of Land and Water Conservation
DUAP	Department of Urban Affairs and Planning (now Planning NSW)
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EMPMP	Emergency Marine Pest Management Program
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ESD	Ecologically Sustainable Development
FM Act	Fisheries Management Act 1994
FMS	Fishery Management Strategy
FP Act	Food Production (Safety) Act 1998
FRCAC	Fisheries Resource Conservation and Assessment Council
FRAC	Fisheries Research Advisory Committee
FRDC	Fisheries Research and Development Corporation
IMCRA	Interim Marine and Coastal Regionalisation for Australia
JAMBA	Japan-Australia Agreement for the Protection of Migratory Birds, Birds in Danger of Extinction and their Environment
MAC	Management Advisory Committee
MPA	Marine Parks Authority
NCC	Nature Conservation Council
NPWS	National Parks and Wildlife Service
NRSMPA	National Representative System of Marine Protected Areas
NSW	New South Wales
NSWF	New South Wales Fisheries
OH	Ocean Hauling
Regulation	Fisheries Management (General) Regulation 2002
RFH	Recreational Fishing Haven
RFO	Recognised Fishing Operation
RFG	Recognised Fishing Ground
RFR	Registered Fish Receiver
RRFR	Restricted Registered Fish Receiver
SPF	Small Pelagic Fishery (formerly known as the Commonwealth Jack Mackerel Fishery)
TAC	Total Allowable Catch
TCM	Total Catchment Management
TSC Act	Threatened Species Conservation Act 1995

Introduction to the Ocean Hauling Fishery FMS

Background

In December 2000, the NSW Government made changes to the way fisheries are managed in NSW. These changes place increased emphasis on ensuring that fishing activities are environmentally sustainable.

The changes require the development of a fishery management strategy for each major commercial fishery, the recreational fishery, the charter boat fishery, fish stocking and for the beach safety program. They also require an assessment of the environmental impacts of those fishing activities.

The Ocean Hauling Fishery

The Ocean Hauling Fishery targets a relatively small number of species compared to other fisheries using similar gear. Approximately 99% of the catch by total landed weight is comprised of less than 20 finfish species (NSW Fisheries catch statistics database 1998/99), taken from ocean waters and sea beaches along the NSW coast using five types of commercial hauling and purse seine nets.

There were approximately 374 fishing businesses with one or more endorsements to operate in the Ocean Hauling Fishery in May 2001. There is a wide variation in the level of participation in the fishery with some fishers operating on a full time professional basis, whilst others operate on a part time or seasonal basis. Full time professional fishers can then be further differentiated between those who operate solely in the Ocean Hauling Fishery, and those who operate in a number of commercial fisheries in NSW. Table 1 below shows the relationship between the Ocean Hauling Fishery and other commercial fisheries in NSW.

The Fishery Management Strategy

The fishery management strategy for the Ocean Hauling Fishery contains the rules for the fishery. But it is much more than a collection of rules. The strategy contains the goals and objectives for the fishery, a detailed description of the way the fishery operates, and describes the management framework for the future. It also outlines a program for monitoring the biological, social and economic performance of the fishery, establishes trigger points for the review of the strategy, and requires annual reporting on performance in order to ensure the objectives set out in the strategy are met.

Information about the impacts of harvesting by other fishing sectors (such as recreational fishing) is also provided, however the rules applying to such sectors are dealt with under separate management arrangements. As such it is not the role of this management strategy to develop such arrangements.

The management advisory committee (MAC) for the Ocean Hauling Fishery provided significant input into the drafting of the strategy. Input into the draft strategy was also sought from all fishers endorsed in the Ocean Hauling Fishery, the Minister for Fisheries' advisory councils on fisheries conservation, recreational fishing and commercial fishing (which includes commercial fishers from other fisheries), and the Fisheries Resource Conservation

and Assessment Council. Government agencies, such as Planning NSW and the Commonwealth's Environment Australia, have also been consulted throughout the drafting of the fishery management strategy.

An environmental impact statement was prepared for the Ocean Hauling Fishery in 2002. The EIS contained the draft fishery management strategy and an environmental assessment on the management rules and risk mitigation measures contained in the strategy. The structure of the EIS was based on guidelines issued by Planning NSW including an assessment of the likely biophysical, social and economic impacts of implementing the draft management strategy.

The EIS was on public exhibition between 1 February 2002 and 18 March 2002. The EIS highlighted the importance of the Ocean Hauling Fishery to the community in terms of employment, supply of seafood to the community and economic benefits. The EIS concluded that the management rules proposed by the fishery management strategy provide for an appropriate allocation of the resource, and incorporate measures needed to address the various principles of ecologically sustainable development.

The Minister for Fisheries made a formal determination under the *Environmental Planning and Assessment Act 1979* in September 2002 with respect to the Ocean Hauling Fishery, which in effect, allows the fishery to continue in accordance with the fishery management strategy. This process relieves ocean hauling fishers of the requirement to undertake individual environmental assessments.

Table 1. Overview of the major marine commercial fisheries in NSW.

(Source: Fletcher & McVea, 2000; Tanner & Liggins, 2000; NSW Fisheries Licensing database – August 2002)

	Ocean hauling	Estuary general	Ocean trap and line	Ocean prawn trawl	Ocean fish trawl	Lobster	Abalone	Estuary prawn trawl
Methods	Beach seine net, Purse seine net	Handline, Trap, Hauling net, Mesh/gill net, Hand collecting	Demersal trap, Handline, Setline, Dropline	Otter trawl net	Otter trawl net	Trap/pot	Diving (hookah)	Otter trawl net
Species	Sea mullet, Sea garfish, Luderick, Yellowtail, Pilchards	Yellowfin bream, Dusky flathead, Sand whiting, Longfinned eels, Sea mullet, Pipis	Snapper, Kingfish, Morwong, Spanner crabs, Silver trevally	King prawn, School prawn, Royal red prawn, Balmain bugs, Octopus	Silver trevally, Tiger flathead, Redfish	Rock lobster (eastern)	Black lip abalone	School prawn, King prawn
Total catch in 1999/00 (t)	2,767	5,239	1,931	2,473	470***	117	325	625
Est. value in 1999/00 (A\$m)	4.8	19.5	10.7	23.4	1.3	4.6	12.7	4.1
No. of authorised fishing businesses in August 2002	333	722	550	318	99	172	44	243
Standard boat length (m)	4	5	6-8	14	14	6-8	6	9
General no. of unlicensed crew	0**	0*	0-1	2	2-3	0-1	1	1

* Unlicensed crew permitted only when undertaking boat based prawn seining

** Unlicensed crew permitted in some forms of boat based hauling

*** Partial catches only, see Fletcher and McVea (2000) for explanation

1. Relevant legislation

a) Objects of the Fisheries Management Act

The *Fisheries Management Act 1994* (FM Act) seeks to achieve ecologically sustainable development for the fisheries of NSW through the achievement of its stated objectives, which are:

- (1) *To conserve, develop and share the fishery resources of the State for the benefit of present and future generations.*
- (2) *In particular the objects of the Act include:*
 - (a) *to conserve fish stocks and key fish habitats, and*
 - (b) *to conserve threatened species, populations and ecological communities of fish and marine vegetation, and*
 - (c) *to promote ecological sustainable development, including the conservation of biological diversity,*

and, consistently with those objects:

 - (d) *to promote viable commercial fishing and aquaculture industries, and*
 - (e) *to promote quality recreational fishing opportunities, and*
 - (f) *to appropriately share fisheries resources between the users of those resources, and*
 - (g) *to provide social and economic benefits for the wider community of New South Wales.*

i) Ecological sustainable development

Ecologically sustainable development (ESD) was defined under the National Strategy for ESD as “development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends”. It can be achieved through the implementation of the following principles and programs¹:

- precautionary principle – if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- intra-generational equity – the benefits and costs of pursuing ESD strategies should be distributed as evenly as practicable within each generation
- inter-generational equity – the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations
- conservation of biological diversity and ecological integrity – conservation of biological diversity and ecological integrity should be a fundamental consideration

¹ Adapted from section 6 (2) of the *NSW Protection of the Environmental Administration Act 1991*.

- improved valuation, pricing and incentive mechanisms – such as user pays and the use of incentive structures to promote efficiency in achieving environmental goals.

b) The NSW Environmental Planning and Assessment Act

The evolution of the new environmental assessment process for commercial fisheries in NSW stems largely from a decision handed down by the Land and Environment Court in January 2000. The Court decided that the issue of an individual commercial fishing licence had to meet the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This meant that the environmental impacts of any authorised activities had to be assessed at the time the licence was issued or renewed.

It is widely accepted that in most cases the best way of assessing the impact of fishing activity is by considering the total impact of fishing, instead of the potentially minor impacts of individual fishers. The Government was concerned that requiring assessment for each individual licence would be an unnecessarily expensive and time-consuming activity. Licensed fishers would have faced a high level of uncertainty and significant individual costs.

After thorough consultation with all stakeholders, the Government decided that the best approach would be to assess the environmental impact of fishing activities at the fishery level. This provides the best approach for both our aquatic environment and stakeholders. The legislation was subsequently amended to provide for the development of fishery management strategies and the environmental assessment of these strategies.

c) The Commonwealth Environment Protection and Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) makes it an offence for a person to undertake an action that has the potential to significantly impact on a matter of 'national environmental significance' without first obtaining a permit from the Commonwealth Minister for Environment and Heritage. Matters of national environmental significance include: declared World Heritage areas; declared Ramsar wetlands; listed threatened species and ecological communities; listed migratory species; listed marine species; nuclear actions; and the environment of Commonwealth marine areas.

The EPBC Act was amended in January 2002 to incorporate the provisions of the Wildlife Protection Act (which was repealed at the same time). The new Part 13A of the EPBC Act has the effect of removing the previous blanket exemption from export control for marine species. As a result, the export of all marine organisms will come under the controls of the EPBC Act and be subject to ecological sustainability assessments based on guidelines established by the Commonwealth. To give time in which those assessments may be made, the exemption will continue until 1 December 2003. Until then, current arrangements regarding export of marine species will remain in effect, that is, the export of most marine fish and the bulk of marine invertebrates will continue to be exempt from export controls under the Act.

If a fishery is not assessed as exempt, it will more than likely be able to continue to supply product for export through an approved wildlife trade operation (section 303FN) under the EPBC Act. These declarations will have conditions attached that will bring the management and operations of the fishery in line with the Commonwealth guidelines. Once declarations are

made, exporters will need to apply for and obtain from Environment Australia a permit to export.

d) The NSW Marine Parks Act

The NSW Government is using a systematic approach to identify sites for marine protected areas and to prioritise new areas for marine biodiversity conservation in NSW waters. There are three types of marine protected areas in NSW - large multiple-use marine parks, small aquatic reserves and the marine and estuarine components of national parks and nature reserves.

Marine Parks aim to conserve biodiversity by protecting representative samples of the habitats in defined 'bioregions'. Zoning and operational plans are used to guide the protection of conservation values and manage activities that occur within the marine park. Four zones are used in marine parks - sanctuary zones, habitat protection zones, general use zones and special purpose zones.

Consultation occurs with the community prior to the declaration of marine parks. Up to date information on the creation and zoning of marine parks in NSW waters is available on the Marine Park Authority website: www.mpa.nsw.gov.au

The *Marine Parks Act 1997* was introduced to provide for the declaration of marine parks in NSW. The objects of the Act are as follows:

- (a) to conserve marine biological diversity and marine habitats by declaring and providing for the management of a comprehensive system of marine parks
- (b) to maintain ecological processes in marine parks
- (c) where consistent with the preceding objects:
 - (i) to provide for ecologically sustainable use of fish (including commercial and recreational fishing) and marine vegetation in marine parks, and
 - (ii) to provide opportunities for public appreciation, understanding and enjoyment of marine parks.

This fishery management strategy has been prepared taking into account, and ensuring consistency with, the objects of the *Marine Parks Act 1997*.

e) Share management plans

i) The role of a share management plan

The *Fisheries Management Act 1994* requires that a share management plan be developed and implemented for all share management fisheries. A share management plan for the Ocean Hauling Fishery will be prepared as part of the transition of the fishery to a full share management regime.

The primary role of a share management plan is to provide a legislative structure for the class or classes of shares and the rights of shareholders in a share management fishery. The share management plan also makes provision for a range of fishery specific controls to be formalised into a regulation. Examples of these include the fish that may be taken, the areas for taking fish,

the times or periods during which the fishery may operate, the protection of fish habitats, as well as the use of boats, fishing gear and bait in the fishery.

The share management plan for the Ocean Hauling Fishery may also bring into operation a number of controls in the fishery that are described in this management strategy. One example of this is the share forfeiture scheme referred to in the management strategy. Whilst the management strategy relies on the share forfeiture scheme as a compliance mechanism for creating an effective deterrent, the workings and provisions of the scheme will be included in the share management plan for the fishery.

A share management plan must include objectives and performance indicators which, for the Ocean Hauling Fishery, will be consistent with the goals and objectives of this management strategy. The share management plan must also specify at what point a review of the plan is required when a performance indicator is not being met. The review process to be included in the share management plan will complement the review process outlined in this management strategy. This will ensure that there is a robust review and reporting framework for the fishery that is underpinned by the provisions of the share management plan.

In addition to a review that may occur if a trigger point is breached, a share management plan for a category 2 share management fishery must also be subject to scheduled periodic review. With regard to the Ocean Hauling Fishery, shares are to be issued for an initial term of 15 years and a review of the management plan is to be conducted between years five and ten of that period.

ii) Transition to share management

The Ocean Hauling Fishery is in the process of moving from being a restricted fishery (under section 111 of the FM Act) to a category 2 share management fishery. The progression to a share management regime is a staged implementation.

The fishery is first identified as a share management fishery by being included in Schedule 1 of the Act. Criteria for the allocation of shares are then determined and when the allocation formula has been decided, a public notice is published inviting applications for shares. Based on the criteria and applications received, provisional shares are issued.

After provisional shares are issued, a legal order is placed in the NSW Government Gazette commencing the "limited access stage" of share management. Once the limited access stage commences a person must hold at least one provisional share in the fishery to be eligible to hold an endorsement. Throughout this stage, the fishery continues to operate under the regulations that applied to the restricted fishery.

Applications for appeals against the allocation of shares are lodged before the fishery is formally commenced. The MAC for the fishery and any other relevant commercial or recreational industry groups will be consulted on the proposed management plan. The management plan for the fishery is then put into regulation, final shares are issued and the fishery then commences as a full share management fishery.

iii) Changes to Regulations

In the most part, the current regulations that apply to the Ocean Hauling Fishery appear in the *Fisheries Management (General) Regulation 2002* ('the Regulation'). The Regulation

sets out the working arrangements that underpin the provisions of the *Fisheries Management Act 1994*, and are made pursuant to that Act. For example, an offence appears in the Act for possessing prohibited size fish (section 16), however it is the Regulation that prescribes the fish species subject to size limits and what those size limits are (clause 7).

This management strategy includes a number of actions that will impact on the current regulations that apply to the fishery. Examples of these includes the incorporation of maximum dimensions of the various net types permitted in the fishery and potential alterations to give effect to the garfish recovery program once developed. Where it is necessary to introduce or change controls prior to the development and implementation of a share management plan for the fishery, changes to the Regulation will be made.

If a management plan for a fishery is inconsistent with any other regulation or fishing closure, the management plan prevails. Therefore, a share management plan is an appropriate tool that can be used to implement controls that are specific to the Ocean Hauling Fishery. The only occasion where a management plan does not prevail over another regulation is if a regulation specifically expresses that it is to have effect despite a management plan. An example of when this may occur is where a short-term closure may be introduced in response to an emergency.

2) Vision and goals for the fishery

a) Fishery vision

The vision for the Ocean Hauling Fishery is:

A profitable Ocean Hauling Fishery which provides the community with fresh local seafood, high value exports, and carries out fishing in an ecologically sustainable manner.

b) Fishery goals

The goals that have been selected for the fishery to assist in achieving this vision are:

1. To manage the Ocean Hauling Fishery in a manner that promotes the conservation of biological diversity in the coastal environment
2. To maintain fish populations harvested by the Ocean Hauling Fishery at ecologically sustainable levels
3. To promote the conservation of threatened species, populations and ecological communities associated with the operation of the Ocean Hauling Fishery
4. To appropriately share the resource and carry out fishing in a manner that minimises social impacts
5. To promote a viable commercial fishery (consistent with ecological sustainability)
6. To ensure cost-effective and efficient ocean hauling management and compliance programs
7. To improve public understanding of the Ocean Hauling Fishery and of the resources upon which the fishery relies
8. To improve knowledge of the Ocean Hauling Fishery and the resources upon which the fishery relies.

3. Fishery description

a) An overview

i) Extent of the fishery

The Ocean Hauling Fishery is one of nine major commercial fisheries in NSW. It is a fishery that uses purse seine nets and a variety of hauling net types to harvest fish (except lobster and abalone) targeting a relatively small number of species such as sea mullet, luderick, yellowtail, blue mackerel, sea garfish and pilchards.

ii) Number of operators

In August 2002, NSW Fisheries licensing database showed 333 fishers were endorsed to operate in the Ocean Hauling Fishery. This number however, constantly varies due to a number of factors including the transfer and amalgamation of fishing businesses and late payments on renewal of fishing licences.

iii) Activities endorsed in the fishery

The fishery is categorised into a number of endorsement types that determine the types of fishing gear each fisher is allowed to use. Table 2 shows the endorsement types available in the fishery and details the activity that is authorised by each endorsement. For example, only fishers with an ocean hauling class C (purse seine) endorsement may take fish for sale using purse nets in ocean waters. More detailed discussion of fishing licences for the fishery appears in section 4(ii).

Table 2. Description of endorsements in the Ocean Hauling Fishery.

Endorsement types	Endorsement description
Class A (skipper)	<p>This endorsement authorises the commercial fisher to take fish for sale in a particular region using one or more types of hauling net authorities specified below where included on the endorsement. The fisher may also assist another person who holds a class A endorsement with the appropriate net authority that authorises the other person to use that net in that region</p> <p>General Purpose net authority- authorises the holder to take fish (other than lobster and abalone) using a general purpose hauling net as defined in the <i>Fisheries Management (General) Regulation 1995</i></p> <p>Garfish Hauling net authority- authorises the holder to take fish (other than prohibited size class of fish, lobster or abalone) using a garfish hauling net as defined in the Regulation</p> <p>Garfish (Bullringing) net authority- authorises the holder to take garfish using a garfish bullringing net as defined in the Regulation</p> <p>Pilchard, Anchovy and Bait net authority- authorises the holder to take fish (other than prohibited size class of fish, garfish, prawns, lobster or abalone) using a garfish hauling net as defined in the Regulation</p>
Class B (crew)	This endorsement authorises the commercial fisher to take fish for sale using a hauling net in a particular region, but only if the holder is assisting another person who holds a licence with a class A endorsement and with the appropriate net authority to use that net in that region
Class C (purse seine)	This endorsement authorises the commercial fisher to take fish for sale using a purse seine net from ocean waters within 3 nm of the natural coastline and the waters of Jervis Bay
Class D (purse seine north)	This endorsement authorises the commercial fisher to take fish for sale using a purse seine net from ocean waters within 3 nm of the natural coastline and north of latitude 32° South

iv) Overall catch levels and value

The Ocean Hauling Fishery is currently fished at a level which leaves little scope for expansion. Catches in the fishery have increased substantially from approximately 500 tonnes to greater than 3,300 tonnes over the last 15 years as the value of the once poorly regarded sea mullet has increased. The beach hauling fishery for pre-spawning sea mullet has now become one of the State's most valuable commercial finfish fisheries.

A high proportion (about 79%) of the catch of sea mullet is taken on the central to mid north coast of NSW and nearly all ocean catches are made in the months from March to June. A significant 'hardgut' (non-spawning condition) component of the fishery occurs during summer in some years.

The stocks of three major species in the purse seine fishery, including pilchards, yellowtail and blue mackerel, are mostly unknown at this time. Approximately 1,000 tonnes of fish were caught commercially by purse seine operators during the 1997/98 season. In recent years the total purse seine catch has generally remained stable, although catches of individual species have fluctuated. Combined annual landings of the four main species (pilchards, yellowtail, blue mackerel and sweep) have fluctuated between 640 tonnes and 1,700 tonnes during the past decade.

Total catches and total value of the Ocean Hauling Fishery are subject to some important qualifications. Since mid-1997, the mandatory catch and effort returns of fishers have been directly related to their activity in each fishery. However, prior to that time, catches were identified as either estuarine or oceanic in origin and it was often not possible to attribute catch to a particular fishery or method. For example, an ocean hauling fisher who also worked in the Ocean Trap and Line Fishery could take bream with either a hauling net or a fish trap, recording all ocean catches taken in a month on one catch return. Assigning value to species caught in the fishery is also problematic. Many species are caught in large volumes and are very likely to be destined for markets other than the large wholesale market in Sydney. This wholesale (for food) market is the primary source of price estimates used to estimate the value of fish landings. Mullet roe processors pay higher prices than “for food” markets, but only for female fish. Some purse seine catches are sold for bait, fishmeal or pet food and also have a different price structure.

The weight and value of catches reported in the Ocean Hauling Fishery for the financial year of 1997/98 totalled 4,638 tonnes and \$7.2 million. For the financial year of 1998/99 the weight and value of catches in the fishery totalled 2,466 tonnes and \$4.1 million (see Table G1 in Appendix G of the Ocean Hauling EIS for an explanation of the basis of these value figures). In this management strategy, no attempt has been made to correct prices for the many, known factors that will make Sydney Fish Market (SFM) prices inaccurate.

Definition of regions and reporting zones

The seven ocean hauling regions are identified in Map 1 and vary in size considerably along the NSW coast. The recording of catches in the Ocean Hauling Fishery demonstrates that fishers target different mixes of species in each of the regions along the state. Table 3 outlines the variations in catches of some target ocean hauling species taken by either class A or class B endorsement holders along the ocean hauling regions in NSW.

Comparing catches between ocean hauling regions may only be done for methods that are restricted to regional boundaries, such as beach-based hauling. Catches taken by multi-zone garfish haulers or purse seine endorsement holders are not included in the ocean hauling regional catches of Table 3 as these endorsement holders may travel across the regional boundaries. Although ocean hauling fishers are restricted to one of the seven defined ocean hauling regions, all commercial landings in the fishery are not reported by ocean hauling regions, but rather by the one-degree latitude ocean zones (see also Map 1), consistent with all other ocean fisheries in NSW. Table 4 outlines the variation in the landings of seven target species taken by all ocean hauling methods along the NSW ocean zones as defined in Map 1.

Table 3. Average production for years 1997/98 and 1998/99 by region for principal hauling species taken by general purpose or pilchard, anchovy and bait (PAB) hauling nets.

(Source: NSW Fisheries catch statistics database)

Ocean Hauling Region	Production (kgs)					
	Sea mullet	Sandy sprat (whitebait)	Pilchard	Australian salmon	Luderick	Bream
Region 1 NSW/QLD border to 29°15' S	114166	47210	64422	0	1747	743
Region 2 29°15' S to 29°45' S	107217	0	9836	0	1691	909
Region 3 29°45' S to 31°44' S	300411	6558	10221	232	32616	13619
Region 4 31°44' S to 33°25' S	765539	182	0	44043	20710	28665
Region 5 33°25' to 34°20' S	164828	4640	650	782	1593	377
Region 6 34°20' S to 35°25' S	65769	1306	9640	14551	5050	2065
Region 7 35°25' S to NSW/Vic border	219728	772	20914	143804	7450	4811
Total	1737658	60668	115681	203411	70857	51188

Note: Catches taken by purse seine nets or garfish hauling nets are not included in these figures.

Catches of Australian salmon are concentrated in the southern ocean hauling regions with small catches taken in the three northernmost regions and the largest level of catch taken in region 7 relative to all other regions. Sandy sprat (whitebait) catches are more patchy with the largest catches taken in region 1. Pilchards are taken in largest quantities in the northern regions with no catches recorded in region 4 and very small quantities recorded in the lower regions. The largest catches of sea mullet are taken in region 4 but substantial quantities are taken throughout the State. Luderick is also taken throughout the state, however, the largest quantities are recorded in regions 3 and 4.

Table 4. Average production (from 1997/98 and 1998/99) by all ocean hauling methods in each ocean catch reporting zone for Ocean Hauling Fishery.

(Source: NSW Fisheries catch statistics database)

Ocean Zone	Production (kgs)						
	Sea mullet	Sea garfish	Blue mackerel	Australian salmon	Yellowtail	Luderick	Bream
Ocean zone 0 North of QLD/NSW border	34112	0	0	1	0	0	0
Ocean zone 1 QLD/NSW border to 29°S	83368	1054	4617	2897	292	1476	675
Ocean zone 2 29°S to 30°S	158082	2987	0	0	0	1740	3531
Ocean zone 3 30°S to 31°S	283848	3709	1136	175	113	35852	13516
Ocean zone 4 31°S to 32°S	551667	4798	1	12521	15	9266	9241
Ocean zone 5 32°S to 33°S	337025	40020	4321	30642	7371	17846	30131
Ocean zone 6 33°S to 34°S	190463	17359	16299	231	30655	1139	400
Ocean zone 7 34°S to 35°S	48891	20583	156367	25396	262051	2525	430
Ocean zone 8 35°S to 36°S	45972	10652	27408	42211	19746	3968	1304
Ocean zone 9 36°S to 37°S	24394	983	93735	41665	58188	1765	12
Ocean zone 10 37°S to NSW/VIC border	16967	2486	96946	53684	19270	1598	162
Total Weight (kgs)	1774789	104631	400830	209423	397701	77175	59402

The purse seine species, such as blue mackerel and yellowtail are taken predominantly in the southern half of the state. Sea garfish catches are taken in larger quantities in the central regions.

Catch by method

The 20 species taken most commonly in the Ocean Hauling Fishery, comprise more than 99% of the harvest in the fishery (see Table 5). The catch from each of the methods used in the fishery is dominated by a small number of species and two or three species usually make up more than 80% of landings for each method (see Table 5). The two main methods, general purpose hauling and purse seining, together take about 90% of the catch of the fishery.

Table 5. Landings for ocean hauling methods expressed as a percentage of the total catch for each method.

Percentages are based on average annual landings for the three years commencing July 1997. The species are the twenty with the highest total landings over the same period (99.1% of total landings) and are presented ranked from greatest to least within the fishery. Note that species named are based on reporting categories and may aggregate two or more species into a single category.

Species	Method Name				
	Garfish bullringing net	Garfish hauling net	General purpose hauling net	Pilchard, anchovy or bait net	Purse seine net
Sea mullet	0.0%	8.4%	76.5%	6.4%	0.0%
Blue mackerel	3.0%	1.8%	0.5%	16.2%	40.9%
Yellowtail	3.2%	1.2%	0.3%	7.5%	39.6%
Australian salmon	0.0%	3.6%	12.8%	0.0%	2.2%
Pilchard	1.1%	0.9%	0.4%	35.3%	9.3%
Sea garfish	90.1%	79.1%	0.2%	0.1%	0.2%
Luderick	0.0%	2.3%	3.3%	0.1%	0.0%
Sandy sprat (whitebait)	0.0%	0.0%	0.1%	24.7%	0.5%
Black and yellowfin bream	0.0%	1.4%	2.3%	0.3%	0.0%
Sweep	0.0%	0.0%	0.0%	0.3%	3.7%
Jack mackerel	0.0%	0.0%	0.0%	0.5%	1.4%
Whitebait (glass fish)	0.0%	0.0%	0.2%	3.8%	0.1%
Anchovy	0.0%	0.0%	0.1%	2.2%	0.8%
Tailor	0.0%	0.1%	0.6%	0.1%	0.0%
Dart	0.0%	0.1%	0.5%	0.1%	0.0%
Sand whiting	0.0%	0.1%	0.4%	0.0%	0.0%
Silver trevally	0.0%	0.1%	0.1%	0.0%	0.4%
Leadenall	0.0%	0.0%	0.3%	0.0%	0.0%
Bonito	0.0%	0.0%	0.1%	0.1%	0.3%
Fantail mullet	0.0%	0.0%	0.2%	0.0%	0.0%
Top 20 as percentage of total catch for method	97.5%	99.2%	99.0%	97.6%	99.5%
Average annual total tonnes	13.8	78.0	1880.4	217.9	948.7

Catch and landings of the prominent species in the fishery

Appendix 3 provides a number of graphs for some of the target species in the fishery which show:

- the total catch for each of these species for the period 1984/85 to 1999/00
- the average catch by month for the period 1997/98
- the distribution of the commercial catch between the commercial fisheries in NSW for the period 1997/98
- the gear types used to take each of the prominent species in the Ocean Hauling Fishery for the period 1997/98.

b) Area

The waters in which ocean hauling may be undertaken include the following:

- (a) ocean waters within three nautical miles of the natural coastline (as defined in Schedule 1 of the *Fisheries Management (General) Regulation 2002*)
- (b) the waters of Jervis Bay
- (c) the waters of Coffs Harbour.

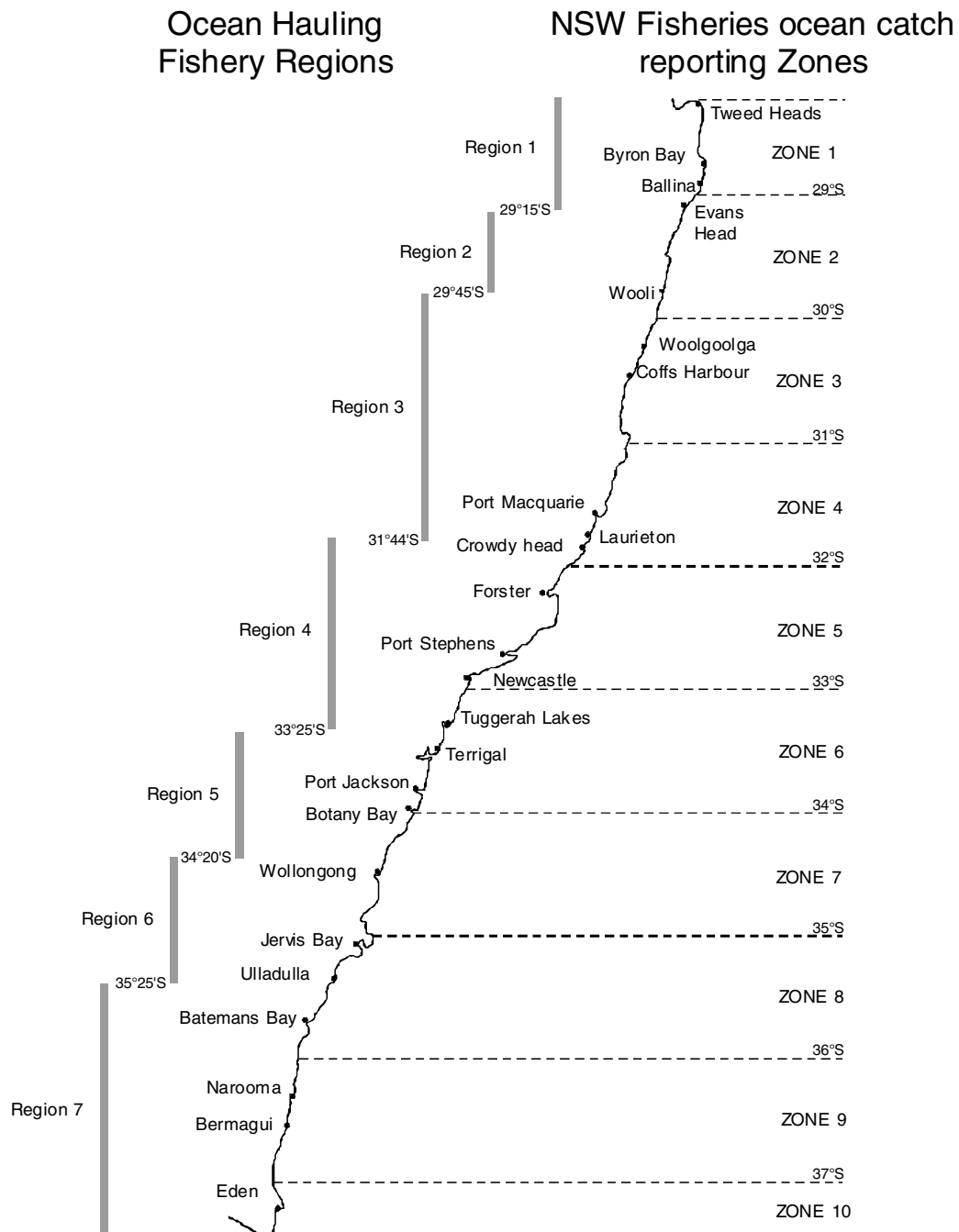
Ocean waters are defined under Schedule 1 of the Regulation as waters east of the natural coastline of NSW, which is defined by a line drawn along the high water mark of the sea. In general, where an estuary meets the coast, the natural coastline is defined as follows:

- (a) a line drawn across the eastern most extremity of two breakwalls
- (b) a line drawn from the eastern most extremity of the one breakwall to the northern or southern extremity of the high water mark on the opposite bank
- (c) a line drawn across the entrance between the eastern most high water mark of the two banks.

Not all NSW ocean beaches and ocean waters are open to the Ocean Hauling Fishery. Appendix 2 contains those closures authorised under section 8 of the FM Act that specifically restrict the area of ocean beaches (and/or ocean waters) where the fishery may operate (see section 4(x) for further information on closures). Details of fishing closures in NSW can be found on the NSW Fisheries website at www.fisheries.nsw.gov.au. The management strategy includes the use of time and area closures to restrict the access of commercial fishers when and where necessary (refer to management response 4.5a). Additional areas of ocean waters and sea beaches may be closed to ocean hauling operations through the declaration of marine protected areas, such as marine parks, aquatic reserves, intertidal protected areas and national park or reserve extension areas.

As part of the implementation of this management strategy (see management response 4.5a), a number of new ocean beach areas have been formally closed to ocean hauling. A list of the areas of ocean beach closed through implementing the outcomes of the regional liaison process is included in Appendix 2.

It is important to note that class A (skipper) endorsement holders and class B (crew) endorsement holders, are restricted to operating within one of seven regions along the NSW coast. The seven ocean hauling regions are identified in Map 1 and vary in size considerably. The class C (purse seine) endorsement holders are not restricted to purse seining in any one region.



Map 1. Regions in the Ocean Hauling Fishery and ocean zones for reporting of commercial landings taken in NSW coastal waters.

c) Species

The Ocean Hauling Fishery is considered to be a very target specific fishery. As discussed in the previous section, for each net prescribed by the fishery, Appendix 1 identifies the target species that may be taken and provides a rule for taking byproduct species. Any additional conditions excluding the taking of certain species by individual methods, such as a prohibited size class of fish by a purse seine net, have also been included in Appendix 1.

Although a relatively short list of target species have been identified for each net, the general purpose hauling net has traditionally taken a much broader range of species than other nets in the fishery. Some species, while not generally targeted all year, may be targeted by fishers on rare occasions. A list of conditional target species has been identified in Appendix 1 for the general purpose net only, to provide for such occasions. Where the opportunity arises, a shot may be taken comprising mostly of conditional target species. However, these species cannot be continually targeted throughout the year.

Byproduct allowed in each net type is dealt with in two ways:

- (1) provision of a compliance rule to prevent targeting of current non-target species, at least 80% by weight of any shot must comprise target or conditional target species
- (2) regionally, and fishery wide, target species for each method must be more than 95% of annual landings.

Table 6 includes the determination of whether a species is a target species, conditional target species, or species not permitted to be taken for each net authority in the fishery. As conditional target species are not to be continually targeted throughout the year, the total annual catch of such species must still fall within the 5% byproduct rule for the total catch taken by a general purpose hauling net annually in each region.

Conditional targets species may be taken in combination with all other byproduct species up to 5% of the total catch. The conditional target species listed in Table 6 fall into three categories in terms of their management and the responsibility for their assessment. Three tuna species (not including mackerel tuna) are all managed by the Commonwealth and their harvest in the Ocean Hauling Fishery is by agreement under the Offshore Constitutional Settlement. The catch of these species is insignificant in the Ocean Hauling Fishery compared to other fisheries. Spanish mackerel, mackerel tuna, mulloay and tarwhine are all managed by NSW and taken largely (>95%) in other fisheries such as the Ocean Trap and Line Fishery. The third group of conditional target species contains leadenall (frigate mackerel) and diamond fish. The Ocean Hauling Fishery is the primary harvester of these species in NSW waters with landings (averaged annually from July 1997 to June 2000) of 5.2 and 1.5 tonnes per year respectively. These later species, along with many of the other byproduct species are managed by the total byproduct limit with careful monitoring to prevent targeting but are unlikely to be the subject of formal assessment in the near future.

i) Species taken in the fishery

Table 6. Relationship among methods of target and conditional target species for all ocean hauling methods.

No take means the species may not be landed from that method.

Species	Exploitation status	Net Authorities			
		GP hauling net	Garfish net	PAB net	Purse seine net
Sea mullet - <i>Mugil cephalus</i>	Fully Fished	Target	No take	Not take	No take
Blue mackerel - <i>Scomber australasicus</i>	Moderately to Fully Fished	Target		Target	Target
Yellowtail - <i>Trachurus novaezelandiae</i>	Fully Fished			Target	Target
Yellowfin bream - <i>Acanthopagrus australis</i>	Fully Fished	Target	No take	No take	No take
Sea garfish - <i>Hyporhamphus australis</i>	Overfished		Target	No take	No take
Sand whiting - <i>Sillago ciliata</i>	Moderately Fished	Target	No take	No take	No take
Pilchards - <i>Sardinops neopilchardus</i>	Unknown			Target	Target
Australian salmon - <i>Arripus trutta</i>	Unknown	Target			Target
Luderick - <i>Girella tricuspidata</i>	Moderately Fished	Target	No take	No take	No take
Dart - <i>Trachinotus spp.</i>	Unknown	Target			
Sandy sprat (whitebait and glass fish) - <i>Hyperlophus vittatus</i>	Unknown			Target	Target
Jack mackerel - <i>Trachurus declivis</i>	Unknown				Target
Anchovy - <i>Engraulis australis</i>	Unknown			Target	Target
Bonito - Family: Scombridae	Unknown	Conditional Target			Target
Silver trevally - <i>Psuedocaranx dentex</i>	Fully to Overfished	Conditional Target			Target
Sweep - <i>Scorpius lineolatis</i>	Unknown	Conditional Target			Target
Leadenall - <i>Auxis thazard</i>	Unknown	Conditional Target			
Mackerel tuna - <i>Euthynnus affinis</i>	Unknown	Conditional Target			No take
Northern bluefin tuna - <i>Thunnus thynnus</i>	Unknown	Conditional Target			No take
Tarwhine - <i>Rhabdosargus sarba</i>	Unknown	Conditional Target	No take	No take	No take
Diamond fish - <i>Monodactylus argenteus</i>	Unknown	Conditional Target			
Yellowfin tuna - <i>Thunnus albacares</i>	Unknown	Conditional Target			No take
Mulloway - <i>Argyrosomus japonicus</i>	Unknown	Conditional Target	No take	No take	No take
Spanish mackerel - <i>Scomberomorus commerson</i>	Unknown	Conditional Target			
Big eye tuna - <i>Thunnus obesus</i>	Unknown	Conditional Target			No take

A summary of the most prominent species taken in the Ocean Hauling Fishery is presented in Appendix 3. The summary presents information on life cycle, habitat preference, catches by fishery and method, seasonal catch trends and average market values for each of these species.

Many species taken in the Ocean Hauling Fishery are also taken in other NSW commercial fisheries, by other sector groups and by fisheries managed under the jurisdiction of the Commonwealth or other States. The FM Act establishes a system of advisory councils who provide advice to the Minister for Fisheries on cross-fishery management issues. NSW Fisheries management and research staff will meet biannually with adjacent jurisdictions to consider consistent management regimes for shared species and to discuss initiatives such as stock assessment, complimentary size limits, monitoring programs and recovery programs for overfished species. Cross jurisdictional collaboration has occurred often on an as-needed basis in the past, however, a more formalised approach to joint management will now be undertaken.

Provided below is a table showing the relative catch levels of target species landed in the Ocean Hauling Fishery and in adjacent jurisdictions.

Table 7. Landings of target species in adjacent jurisdictions.

Ocean Hauling Target Species	NSW 1998/9	Victoria 1997/8	Queensland 1996	Commonwealth
Anchovy	2	326		
Australian salmon	160	708		
Black Bream		155		
Blue Mackerel	356			JMF, SENTF, Bait
Bonito	263			
Dart	9		29	
E. Sea Garfish	78	91		
Jack Mackerel	15	6		JMF, SENTF, Bait
Luderick	470	51		
Pilchard	194	791	52	JMF, SENTF, Bait
Sand Whiting	165			
Sandy Sprat	39			
Sea Mullet	2905	14	1704	
Sweep	81			
Yellowfin Bream	343		138	
Yellowtail	442			JMF, SENTF, Bait

ii) Bycatch species

Bycatch consists of those animals that are discarded from the catch or retained for scientific purposes, and that part of the “catch” that is not landed but is killed as a result of interaction with fishing gear. Fish that are landed are sometimes discarded because there is no market for that type (or size) of fish, or because the regulations prevent the fish from being retained (e.g. if it is smaller than the minimum legal length or is a species protected from commercial fishing).

No estimates of bycatch for any method in the Ocean Hauling Fishery are available. Anecdotal evidence and recorded landings suggest that catches within the fishery tend to be targeted at a single species and with little bycatch. Fishers observe schools prior to deploying nets and are thought to be able to determine catch composition with reasonable accuracy. Catches taken by beach haul nets generally consist of mature adults. Various species of sharks

and rays are occasionally taken in small quantities. Studies identifying actual bycatch species in the fishery and investigating the best-practice techniques to minimise any bycatch are provided for in management responses 1.1a-c in section 8.

iii) Size limits

Size limits apply to a number of key species taken in the Ocean Hauling Fishery. Table 8 lists the minimum legal lengths that apply to species permitted to be taken in the fishery.

Table 8. Minimum legal sizes species that may be taken in the Ocean Hauling Fishery.

Species	Size limit - Total length (cm)
Sea mullet	30
Luderick	25
Bream (yellowfin or black)	25
Tailor*	30
Mulloway	45
Tarwhine	20
Sand whiting	27
Dusky flathead*	36**
Sand flathead*	33
Snapper*	30***
Teraglin*	38
School shark*	91

* byproduct only

** increased from 33 cm on 1 July 2001

*** increased from 28 cm on 1 July 2001

iv) Protected fish

The *Fisheries Management (General) Regulation 2002* identifies a number of species that are protected, either from commercial fishing or fishing by all sectors. Table 9 contains these lists of species as at March 2002.

Commercial fishers are not permitted to take either protected fish or fish protected from commercial fishing (table 10).

Table 9. Fish species protected from fishing by all sectors.

Protected fish include:	
Common name	Scientific name
Ballina angelfish	<i>Chaetodontoplus ballinae</i>
Eastern blue devil fish	<i>Paraplesiops bleekeri</i>
Elegant wrasse	<i>Anampses eleganus</i>
Estuary cod	<i>Epinephelus coioides</i>
Giant Queensland groper	<i>Epinephelus lanceolatus</i>
Grey nurse shark	<i>Carcharius taurus</i>
Great white shark	<i>Carcharodon carcharias</i>
Herbst nurse shark	<i>Odontaspis ferox</i>
Black rock cod	<i>Epinephelus daemeli</i>
Weedy sea dragon	<i>Phyllopteryx taeniolatus</i>
Australian grayling	<i>Prototroctes maraena</i>
Eastern freshwater cod	<i>Maccullochella ikei</i>
Trout cod	<i>Maccullochella macquariensis</i>
Macquarie perch	<i>Macquaria australasica</i>

Table 10. Fish protected from commercial fishing only.

Fish protected from commercial fishing include:	
Common name	Scientific name
Black marlin	<i>Makaira indica</i>
Blue marlin	<i>Makaira nigricans</i>
Striped marlin	<i>Tetrapturus audax</i>
Blue groper	<i>Achoerodus viridis</i>
Atlantic salmon	<i>Salmo salar</i>
Australian bass	<i>Macquaria novemaculeata</i>
Eel-tailed catfish	<i>Tandanus tandanus</i>
Estuary perch	<i>Macquaria colonorum</i>
Silver perch	<i>Bidyanus bidyanus</i>
Brook trout	<i>Salvelinus fontinalis</i>
Brown trout	<i>Salmo trutta</i>
Rainbow trout	<i>Oncorhynchus mykiss</i>
Freshwater crayfish	<i>Euastacus</i> spp., <i>Cherax</i> spp. (except <i>Cherax destructor</i>)

Of the species that appear in the lists above, fishers in the Ocean Hauling Fishery are not likely to have any direct or indirect interaction with the majority of the species.

A range of threatened species, other than fish, are protected by other legislation including the NSW *Threatened Species Conservation Act 1995*, the NSW *National Parks and Wildlife Act 1974*, and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

v) **Interactions with threatened species and species of public concern**

Although interactions with threatened species have not been recorded in this fishery and are thought to be minimal, this management strategy includes two direct measures to obtain data on any such interactions. The first of these measures is the implementation of a scientific

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v) **Interactions with threatened species and species of public concern**

Although interactions with threatened species have not been recorded in this fishery and are thought to be minimal, this management strategy includes two direct measures to obtain data on any such interactions. The first of these measures is the implementation of a scientific

observer program which will collect data on interactions (see management response 1.1a). Secondly, a modification to the monthly mandatory catch return forms will incorporate reporting fishers' interactions with threatened species (see management response 3.1a).

A number of management responses also appear in section 8, which are aimed at minimising impacts on threatened species. These measures include using fishing closures (management response 4.5a), modifying gear use (management response 1.1b) and implementing the provisions of any threatened species recovery plans or threat abatement plans (management response 3.1b).

vi) Status of species within the fishery

NSW Fisheries uses a standardised method of reporting for the exploitation status of fish stocks across all commercial fisheries. To allow a species based management approach where all known impacts on species are considered, where there are data, recreational harvest, charter boat harvest and landings from other sectors are also taken into consideration when determining a status. This reporting method uses the terms defined in Table 11 to describe the stock status:

Table 11. Definitions of exploitation status of fish stocks.

Exploitation status	Definition
Under fished	The appraisal of a fish stock that suggests that the stock has the potential to sustain catches significantly higher than those currently being taken
Moderately fished (sustainable)	The stock is assessed to be fished at levels which would probably allow only limited increases in catches
Fully fished (sustainable)	The appraisal of a stock which suggests that current catches are sustainable and close to optimum levels (the definition of which may vary between fisheries; e.g. catches are close to maximum sustainable yield, or fishing effort is close to a biological reference point). In a fully fished fishery, significant increases in fishing effort above current levels may lead to overfishing
Overfished / Depleted	The appraisal suggests that current fishing levels may not be sustainable, and/or yields may be higher in the long term if the fishing level is reduced in the short term. This may be due to recruitment overfishing, growth overfishing and/or as a result of habitat degradation
Uncertain	There is little or no information about the status of this stock (e.g. no catch data or only very recent catch data)
Unknown	The only information about the status of this stock is long term fishery dependent catch data

vii) Overfished species

When a species taken in this fishery is determined as 'overfished', this management strategy requires the implementation of, or assistance in developing, a recovery program for that species (see objective 2.5 and related management responses in section 8 of this management strategy). A recovery program must include a description of the actions proposed to return to acceptable levels those parameters which have led to the determination of being 'overfished'. The recovery program will also set out a timeframe for that process and may specify further appropriate action should recovery targets not be met.

Definitions of overfished status

There are two types of overfishing, both of which, when detected, require management action. It is important to note that the two are not mutually exclusive. "Growth overfishing" occurs when individual fish are typically harvested before the size that takes best advantage of the species growth in relation to expected natural mortality. "Recruitment overfishing" can be far more serious and occurs when fishing pressure has reduced the ability of a stock to replenish itself.

Designation of a species as overfished

The information needed to clearly determine that a species has been growth overfished is more likely to be available than the information needed to detect recruitment overfishing. Most formal definitions of recruitment overfishing are determined on the basis of an understanding of relative rates of fishing mortality, population growth and population biomass as well as the relationship between spawners and recruitment (e.g. Hilborn and Walters, 1992). Even the most thoroughly studied species in NSW may not have relevant information on all those topics.

NSW Fisheries will consider advice from fisheries scientists as part of the annual assessment of the status of fish stocks in NSW, or as a result of a review arising from a trigger point breach (see section 9 of this management strategy). That advice could come as results of internal research become available, or from other agencies doing research relevant to assessment of species harvested in NSW. If the species is the subject of a formal stock assessment process, the indication of overfishing is likely to come from having a performance indicator outside acceptable parameters. Other species' status will be reviewed on the basis of the best available biological and catch information. Table 6 shows the target and conditional target species of the fishery, and provides information (where data is available) on the exploitation status of the species.

A stock that has had sufficient fishing mortality to cause a reduction in recruitment requires effective remediation. However, information that clearly demonstrates that a species recruitment has been impacted by fishing is difficult and expensive to collect and likely to be rare. Management responses will need to be precautionary and are likely to draw inference from catch and catch composition, rather than from direct measurements of recruitment. For example, rapid declines in catch (especially when the species is targeted in a spawning aggregation), increases in average size or missing years in age compositions are all indicative of potential problems with recruitment.

When new information that is likely to change the present status of a fish species is received by NSW Fisheries, NSW Fisheries scientists will review the status determination for that species against the criteria specified in table 11 and report on the updated status in the annual report "Status of Fisheries Resources". If a species is designated as overfished, a recovery program involving all harvest sectors will be developed.

Appropriate management responses for different types of overfishing

Growth overfishing generally implies the productivity of a stock is being mismanaged by harvesting animals at too young an age. Fish stocks that are growth overfished are not necessarily in danger of imminent collapse and populations can be growth overfished and still be stable. However, growth overfishing may increase the risk to the population of subsequent

recruitment failure arising from fishing pressure or external factors. The typical and most appropriate response to growth overfishing is to increase the average size at first harvest. This is commonly done by imposing a minimum size limit or increasing an existing one. The efficacy of such a response depends largely on the methods of capture and whether the selectivity of those methods can be appropriately altered to match the new size limit, as otherwise wasteful discarding can occur. Careful thought must be given to changing size limits where there are problems in adjusting the selectivity of the primary fishing methods for that species.

Recovery programs for species suspected of having depressed recruitment due to overfishing must include strong precautionary action. Actions could include (but may not be limited to) temporary fishery closures or caps on either catch or fishing effort. Recovery programs for recruitment overfished species may also include changes to the monitoring program for that species and/or require targeted research to improve the assessment of risk to the species in critical areas.

Species in the fishery determined as being overfished

Sea garfish (*Hyporhamphus australis*)

A dramatic decline in the landings of sea garfish through the 1990s has prompted concern over the status of the stock. The concern is heightened by the lack of knowledge of the biology of the species. Catch levels are as low as 10% of the values from the early 1990s and the high value of the species makes it more likely that the decline in catch reflects a decline in abundance of the species.

The Ocean Hauling Fishery is the primary harvester of sea garfish and this management strategy requires the development of a recovery program for that species (see objective 2.5.1 and associated management response). The Estuary General Fishery is the only other significant harvester of sea garfish. Significant aspects of the recovery program are to be negotiated between the Estuary General MAC and the Ocean Hauling MAC (refer to management response 2.5e).

Appendix 3 includes a summary of sea garfish, including general information on the biology of the species, habitats, catch and market information.

Silver trevally (*Pseudocaranx dentex*)

Rowling and Raines (2000) determined silver trevally as being growth overfished. There has been a significant decline in commercial landings of silver trevally since the mid 1980s, from about 1000 tonnes per annum to around 300 tonnes per annum. The Ocean Hauling Fishery catches approximately 1% of the total NSW commercial catch of silver trevally (based on average landings 1997/98 and 1998/99). Significant catches of silver trevally are taken in the ocean fish trawl (55%), ocean trap and line (28%) and estuary general fisheries (16%) in NSW and the south east trawl fishery managed by the Commonwealth. There is also a significant recreational catch of the species.

As the Ocean Fish Trawl Fishery is the primary fishery in NSW in which silver trevally are taken, a recovery program for the species will be developed for the species under the Ocean Fish Trawl FMS. The Ocean Hauling Fishery will contribute to the development of the recovery program, and will implement actions as needed under that program.

Appendix 3 includes a summary of silver trevally, including general information on the biology of the species, habitats, catch and market information.

Specific actions in the management strategy to address overfishing

Objective 2.5 in section 8 of this management strategy provides a mechanism for the fishery to participate in the recovery of overfished species. The objective has three major management responses as set out below and the most appropriate management response for the fishery to adopt will be dependent upon the catch levels relative to other fisheries. The three management responses for objective 2.5 are listed below:

- (a) for species where the fishery is a major harvester, develop and implement a recovery program for the species within a specified timeframe*
- (b) or species where the fishery is a minor harvester, contribute to the development of and/or participate in the implementation of a recovery program for the species and adopt any measures required by that plan*
- (c) during the period of development of the recovery program for a species that has been determined as being recruitment overfished, implement precautionary actions including but not limited to:*
 - total harvest controls*
 - reductions in effort associated with the harvest of the species*
 - the implementation of fishing closures*
 - bycatch management provisions*
 - mandatory gear changes.*

d) Gear used in the fishery

Fishing gear used in the fishery consists of a range of hauling nets and purse seine nets used to target finfish. Although not a prescribed method in the fishery, the use of a lift net by licensed commercial fishers to take bait for tuna operations will also be managed under the auspices of the Ocean Hauling Fishery.

The following sections describe the fishing gear used in the fishery and give details relating to the standard dimensions of that gear. Appendix 1 identifies more specific gear dimensions that apply in the fishery and any variations due to area. The dimensions that apply to some of the gear types differ between ocean waters and Jervis Bay. For example, the general purpose hauling nets able to be used in ocean waters have a longer overall length of net and different mesh size (outside of the travelling season) to the general purpose hauling nets able to be used Jervis Bay. Management response 2.1c includes a restriction on the gear dimensions of nets used in the fishery to those defined in Appendix 1.

This management strategy includes a restriction on the species taken by each prescribed gear type to identified target species, conditional target species, and allows for byproduct (subject to conditions) (see management response 1.3a). Under the management strategy, a 'priority of shot' rule applies to teams hauling to and from sea beaches.

i) Fish hauling nets***General purpose hauling net***

These hauling nets are made from netting material varying in mesh size, with a minimum mesh of 50 mm in the bunt and a minimum mesh of 80 mm in the wings of the net for most of the year. The length of each hauling line attached to the net does not exceed the total length of the net to which it is attached. The measurements of the net in the travelling season (1 March to 31 July each year) are 50 - 65 mm in the bunt, 65 - 86 mm in the wings, with the maximum length of the net not to exceed 400 m. In ocean waters and on sea beaches the bunt of the net must not exceed 1/3 of the total length of the net excluding hauling lines.

This net type is predominantly used to catch sea mullet, however, it is lawful to retain a broad range of species, including bream and luderick, caught in this net whilst it is being used in ocean waters. Although minimum mesh sizes apply to general purpose hauling nets, the impact of hauling on bycatch species or organisms not retained by the net are generally unknown. Details of the target species, conditional target species and byproduct rule for the general purpose net are contained in Appendix 1.

This management strategy amends the definition of the general purpose hauling nets, by excluding the use of rings on the net and requiring that the net must be used to and from the beach. Amendments to the definition of general purpose hauling nets used in Jervis Bay are also included within Appendix 1.

Pilchard anchovy and bait net

The management strategy provides for the lawful use of this hauling net provided that the total length of the net does not exceed 300 m with hauling lines of no more than 500 m each and the mesh size throughout is not less than 13 mm. All additional amendments to the definition and use of the pilchard, anchovy and bait net are contained within Appendix 1.

This net type is predominantly used to catch pilchards, yellowtail, blue mackerel and whitebait. Details of the target species, conditional target species and byproduct rule are contained in Appendix 1.

Garfish hauling net

A garfish hauling net is a net specifically designed to catch garfish. This management strategy includes an action to drop the concession to use garfish hauling nets with 25 mm mesh dimension. The permissible mesh size dimensions of a garfish hauling net will be strictly limited to 28 mm or more. Mesh size restrictions are used to prevent the capture of small fish or non-target species. The total length of a garfish net (previously unspecified) is to be no more than 300 m with rope not exceeding 300 m.

Sea garfish constitute the majority of the catch taken by these nets and they are to be the single target species for this method. Details of the byproduct rule and all additional amendments to the definition and use of the garfish hauling net are contained within Appendix 1.

ii) Other methods

Garfish bullringing net

The garfish bullringing net is historically a method used in estuary waters to target garfish, and this will be removed from use in ocean waters (under management response 2.5e in section 8 of this management strategy).

Purse seine net

In Twofold Bay and Jervis Bay, there are no mesh size restrictions, however, the total length of a purse seine net must not exceed 275 m. In all other ocean waters the mesh size throughout the net must not exceed 150 mm. This management strategy applies the 150 mm mesh restriction to those nets used in Jervis Bay and Twofold Bay. The net length must not exceed the length on the net registration, however, the maximum length for a purse seine net used in ocean waters (with the exception of Twofold Bay) is 1000 m. All purse seine nets must be shot from a boat and retrieved to a boat.

Purse seine nets predominantly target species such as pilchards, yellowtail and blue mackerel. Details of the target species, byproduct rule and all additional amendments to the definition and use of the purse seine net are contained within Appendix 1.

Lift net

A lift net is used only for collection of pilchards, blue mackerel and yellowtail as bait for taking tuna. The lift net consists of netting which can be suspended from a rigid frame and is submerged below the vessel operating the net. Burley or fish attraction devices are then used to aggregate fish above the net, before the net is lifted collecting fish for bait.

Only commercially licensed fishers in NSW targeting tuna may operate a lift net to take bait for the tuna operation. A number of Commonwealth fishers, with either tuna longlining, poling or tuna purse seining Commonwealth permits, are issued NSW commercial licences and restricted to a licence condition that only permits their use of a lift net to take bait for their Commonwealth tuna operations. Details of the design and use of this net can be found in Appendix 1. The management of the harvest of bait using this method is described in management responses 2.2e and 2.2f in section 8.

iii) Boats used in the fishery

Although previously dominated by beach based fishers, technological advances in operations has seen an increase in boat based operations in the fishery.

The boats used in the beach haul sector of the fishery vary broadly from the generally small 'run-about' or 'punt' style vessels to larger and faster 'jet boat' style vessels with motors up to 45 horsepower. The 'run-about' or 'punt' style vessels are often also used in the estuary general fishery, while some of the more powerful vessels are sometimes used in the ocean trap and line fishery, by those fishers who also hold endorsements in either fishery.

Typical 'run-about' style vessels are generally between three and six metres in length. Vessels of this size constitute approximately 70% of the commercial fishing fleet in NSW (NSW Fisheries Licensing Database). Boats in this fishery can often simply be oar powered or have a

motor. Total number of fishing boats, and the relative age of the boats, currently used in the ocean hauling fishery is unknown. As many fishers are beach based, commercial catch records in recent years have not provided for the recording of vessels.

The boats used in the boat based or purse seine sectors of the fishery are often a larger version of the typical runabout described above. However, another common type of vessel used in purse seining is between 10 and 50 tonne displacement volume and capable of handling the large catches which are sometimes part of the purse seine fishery.

e) Interactions with other fisheries

The Ocean Hauling Fishery interacts with a number of other designated fishing activities. These activities include other commercial fisheries, recreational fishing, charter boat fishing, the beach safety program and the stocking of fish into NSW waters. This section discusses on the interaction between these activities and the Ocean Hauling Fishery.

Interactions with other NSW commercial fisheries

There are 404 fishers (as opposed to 374 fishing businesses) with at least one entitlement to fish in the Ocean Hauling Fishery. Approximately 90% of ocean hauling fishers hold entitlements in other fisheries. Ocean hauling fishers most commonly have entitlements to fish in the Estuary General Fishery and the Ocean Trap and Line Fishery.

The actual participation in the Ocean Hauling Fishery is more difficult to describe because of the way hauling crews are able to report their activities under a single skipper. It is likely then, that true participation is greater than just those fishers with catch assigned to their returns. Participation in the Ocean Hauling Fishery is marginally greater than in other fisheries, with 277 and 225 fishers reporting catch in 1997/98 and 1998/99, respectively. There were 300 individuals who recorded catch in one or other of the two years and of these 300, 256 reported catch in other fisheries. Those fishers reporting catch in fisheries in addition to ocean hauling most commonly reported from one or two other fisheries.

Of the fishers who participated in the Ocean Hauling Fishery, approximately:

14% participated in the Ocean Hauling Fishery only

48% participated in 2 fisheries

34% participated in 3 fisheries

3% participated in 4 or more fisheries

Participation generally mirrors entitlements and is most common in the Estuary General Fishery and next most common in the Ocean Trap and Line Fishery.

The Lobster Fishery uses a number of ocean hauling target species as bait in inshore lobster traps. These fish baits are usually fresh, frozen or salted, and may compromise whole or part fish. Mullet and luderick are commonly used baits in the Lobster Fishery and some of these are supplied by both the Estuary General and Ocean Hauling Fisheries.

There is no overlap of species taken in this fishery with the Inland, Abalone or Lobster Fisheries. Abalone and lobsters are only permitted to be taken commercially by fishers endorsed in those fisheries.

Interactions with commercial fisheries in other jurisdictions

Many of the target species from the ocean hauling fishery are also taken in the coastal fisheries managed by Queensland, Victoria and the Commonwealth. Estimates of recent landings from those adjacent state fisheries are shown in table 7.

Offshore Constitutional Settlement (OCS)

The Offshore Constitutional Settlements (OCS) involves an exchange in power between the States and the Commonwealth over marine and seabed resources. These settlements aim to provide a framework for more ecologically rational management of fish populations and simplification of administration and licensing for fishers.

An OCS was reached between NSW and the Commonwealth in 1991 that defines jurisdiction over specific fisheries by area, species and gear type. This OCS is still binding and covers waters outside 3 nautical miles (nm). The Commonwealth retain jurisdiction over tuna and billfish species by the main commercial methods in all offshore waters (outside 3nm) and over the 16 major trawl species (see attachment) by the methods of fish trawling south of Barrenjoey Point only. The Commonwealth Small Pelagics Fishery also extends outward from 3 nm.

Under the agreement, NSW retains jurisdiction for all species in all coastal waters (inside 3nm). North of Barrenjoey Point, the Commonwealth has ceded jurisdiction for all species from 3 nm to about 80 nm (except tuna and tuna like species and the Small Pelagics Fishery). South of Barrenjoey Point, NSW has jurisdiction for trawling inside 3 nm only, however NSW still retains jurisdiction outside 3 nm to about 80 nm for all other species, except tuna and tuna like species and the Small Pelagics Fishery.

Since the signing of this agreement, negotiations have continued between the Commonwealth and NSW in an attempt to further simplify the agreement and meet fishers requirements and expectations.

Some jurisdictions allow Commonwealth endorsed fishers to harvest bait within the relevant state waters based on their Commonwealth endorsement alone. Commonwealth operators wishing to harvest bait from NSW waters require a permit or the relevant NSW endorsement. Further discussions with the Commonwealth may occur with respect to this arrangement. In addition, discussions are also occurring with the Commonwealth regarding permit holders being required to complete a catch record relating to bait harvested in accordance with purse seine permits.

The Commonwealth Tuna Fishery

Commonwealth tuna longliners and polers interact with the ocean hauling fishery (and NSW recreational and charter fisheries) when collecting bait. Bait collection is limited to yellowtail scad, blue mackerel and pilchards. Collection is under permit or licence condition and the bait may not be sold and must be used for tuna fishing.

The Commonwealth Small Pelagics Fishery

The Commonwealth Small Pelagics Fishery includes the use of purse seine and mid water trawl nets in Commonwealth waters and is managed by the Australian Fisheries Management Authority (AFMA). There is currently very little information available on any of

the catches taken in the Small Pelagics Fishery and particularly the impact of this fishery on the NSW ocean hauling fishery.

Small pelagic species currently under Commonwealth jurisdiction in the Small Pelagics Fishery include jack mackerel (*Trachurus declivis*), Peruvian jack mackerel (*T. murphyi*), yellowtail (*T. novaezelandiae*), blue mackerel (*Scomber australasicus*) and redbait (*Emmelichthys nitidus*). Catches in the Small Pelagics Fishery are not identified by species and the most recent reported catch from the entire Small Pelagics Fishery was 3790 tonnes (www.afma.gov.au/fisheries/small%20pelagic/default.htm).

The Commonwealth Gillnet, Hook and Trap Fishery (GHTF)

There is very little overlap between most of the GHTF and the NSW Ocean Hauling Fishery. However, there are a number of purse seine endorsements in that fishery that have access to the same species as the Small Pelagics Fishery adjacent to NSW waters.

Interactions with the recreational fishery

To obtain reliable estimates of non-commercial fishing patterns and levels of harvest, a National Recreational and Indigenous Fishing Survey was completed in 2002. Data from the survey shows a reasonable interaction between recreational fishing and the Ocean Hauling Fishery, as some of the target species within the fishery are also targeted by recreational anglers. This includes yellowfin bream, sand whiting, Australian salmon, luderick and to a lesser degree yellowtail which is often used as bait by recreational anglers. Figures from the National Recreational and Indigenous Fishing Survey indicates that approximately 17.1% of the NSW population (approximately 1 million people) participate in recreational fishing.

Interaction with the beach safety (shark meshing) program

There is negligible interaction between the Ocean Hauling Fishery and the beach safety program which occurs in ocean waters.

Interaction with fish stocking

There is minimal interaction between the Ocean Hauling Fishery and fish stocking as stocking programs predominantly take place in freshwater areas including lakes and impoundments.

4) Management Controls and Administration

There are two broad types of fishery management controls, known as input controls and output controls. Input controls limit the amount of effort commercial fishers put into their fishing activities, indirectly controlling the amount of fish caught. They need to be continually modified in response to fishing technology. Input controls can include restrictions on the number of licences, the size and engine capacity of boats, the length and mesh size of nets, and the areas and times which can be worked. Output controls, on the other hand, directly limit the amount of fish that can be taken from the water and are well suited for single species, high value fisheries using single gear types (Goulstone, 1996).

The Ocean Hauling Fishery in NSW is predominantly managed by input controls. The following section sets out in broad terms the controls that apply to activities in the fishery. The specific rules, such as the net length and mesh sizes applying in particular areas, are detailed in Appendix 2 and in the *Fisheries Management (General) Regulation 2002*.

i) Limited entry

The Ocean Hauling Fishery was recently declared a category 2 share management fishery. Access to the fishery has been limited to eligible fishers since the restricted fishery regime commenced for class A (skipper) and class B (crew) sectors of the fishery on 1 March 1995 and for the class C (purse seine) sector on 1 March 1997.

Initial entry to the Ocean Hauling Fishery under the restricted fishery regime for most methods was defined by having minimum level of catch history (and ownership of relevant net registration/s) showing that the method/s sought in the application had been the activity/ies used over past years. An extensive statutory appeals process followed.

Following changes to the FM Act in December 2000, the Ocean Hauling Fishery, along with most other major commercial fisheries, was selected to become a category 2 share management fishery. Section 1(e) outlines the process of moving from a restricted fishery regime to a share management regime.

ii) Licensing Arrangements

Commercial fishing licences

A commercial fishing licence is required by an individual before they can take fish for sale or be in possession of commercial fishing gear in or adjacent to any waters. The licence only authorises activities that are covered by the endorsements in respect to each part of the fishery and specified on the licence. Conditions may be placed on licences in order to restrict fisher's commercial activities where required.

Commercial fishing licences are currently available to persons who held a licence immediately prior to the commencement of FM Act, owners of a recognised fishing operation (RFO), or a nominated fisher of an RFO, or individuals who are the holder of shares in a share management fishery. This latter provision will become the more relevant requirement as the Ocean Hauling Fishery moves toward full implementation of category 2 share management.

This management strategy retains the RFO concept under category 2 share management, and will use shares to allow for structural adjustment at the fishing business level improve the economic viability of fishers. The provisions in the management strategy will supersede the relevant provisions of the Licensing Policy as they are implemented.

Table 12. Number of commercial fishers endorsed in each sector of the Ocean Hauling Fishery.

(Source: NSW Fisheries Database, as at May 2001)

Endorsement type		Number of businesses with endorsements							Total
		Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	
		Border to 29°15'S	29°15'S to 29°45'S	29°45'S to 31°44'S	31°44'S to 33°25'S	33°25'S to 34°20'S	34°20'S to 35°25'S	35°25'S to Border	
Class A (skipper)**	Hauling net (general purpose)	10	16	28	60	14	24	16	168
	Garfish net (hauling)	1	2	7	26	12	27	7	82
	Garfish net (bullringing)	0	1	0	7	2	7	4	21
	Pilchard, anchovy and bait net	9	4	10	8	11	4	0	46
Class A (skipper) total		10	16	28	63	14	33	13	184*
Class B (crew) total		17	22	28	70	14	28	22	203*
Class C (purse seine) total		N/A	N/A	N/A	N/A	N/A	N/A	N/A	26*

*Includes those who have class A and class C endorsements and those with a class B (with special arrangements) and class C endorsements.

**Those who have been allocated a class A endorsement may hold more than one net authority.

Note: Those fishers holding a class B (with special arrangements) may hold one or more net authorities normally only associated with the class A endorsement.

In addition to the 26 Class C purse seine endorsement holders as shown in table 12 above, there were an additional 37 Class C permit holders at September 2002.

The eligibility to hold endorsements on a commercial fishing licence in a category 2 share management fishery is based on the shareholder holding the minimum number of shares specified in the management plan for the fishery. Separate minimum shareholdings may apply to each endorsement or each region in the fishery, or to both.

Section 8 of this management strategy includes a number of principles that will be adopted with respect to setting minimum shareholdings in the management plan (see management response 2.2d). The principles relate to having a minimum shareholding at the fishing business level (taking into account shares in other fisheries) for new entrants to the fishery, and at the operational level for the hauling methods of the fishery (i.e. at the level of the hauling team for each method).

It must be recognised that any application of minimum shareholdings in the Ocean Hauling Fishery is a long-term approach to restructuring fishing effort. Unless there is a direct link between share holdings and fishing effort, other management tools (particularly closures) will be used to achieve any required short-term changes in fishing effort or practices.

Fishing boat licensing

In addition to each fisher requiring a commercial fishing licence and most fishing nets having to be registered, every fishing boat used in connection with ocean hauling must also be

licensed. There has been a cap on the total number of boat licences since 1984 (includes boats used in all fisheries) and this restriction will remain for the duration of the management strategy.

To prevent any increase in size and therefore efficiency of vessels in the fishery, a strict boat replacement policy exists and will continue under the management strategy. A previous restriction of 5.8 m applied to boats used in the Ocean Hauling Fishery. Following a recommendation by the Estuary General Fishery MAC and the Advisory Council on Commercial Fishing, boats 5.8 m in length or less may be replaced with boats up to 6 m. Boats that are greater than 6 m in length may only be replaced with boats that are no more than 10% or 1 m greater in length, whichever is lesser. The 10% tolerance continues to relate to the original boat length to avoid a progressive increase in boat length over time.

In addition, the Minister for Fisheries has approved a new provision allowing fishers to temporarily replace their fishing boats with smaller boats for up to two years. During this time, a permanent boat replacement must be made with respect to the original boat.

Provisions for unlicensed crew

Unlicensed crew can not currently be employed in the class A (skipper) and class B (crew) sectors of the fishery. The holder of an endorsement in the class C (purse seine) sector of the fishery may apply for an authorisation to employ unlicensed and unregistered crew or may employ a person who themselves are registered as crew. The authorisation is commonly referred to as a 'block licence'.

An application for a crew registration may be refused if the applicant has been convicted of an offence referred to in the FM Act and its regulations. A licensed fisher employing crew must maintain records about their crew. Information relating to crew must be recorded on the catch return submitted each month by the licence.

The management strategy will continue the restrictions on the use of unlicensed crew, however the implementation of minimum shareholdings to operate a hauling team provided for in management response 2.2d has the capacity to change arrangements for unlicensed crew.

Special arrangements for skippers and crew

Special arrangements for skippers and crew are in place which allow for certain fishers who would only be eligible for a class B (crew) endorsement to be authorised as if they hold a class A (skipper) endorsement. These arrangements are often referred to as 'floating skipper' arrangements. These arrangements only apply when the eligible class A (skipper) endorsement holder of a fishing business is not working as a skipper.

The arrangements are transitional in nature and lapse when a fishing business is sold. Consideration as to the continuance or otherwise of these special arrangements will be considered during the development of the share management plan.

Controls on collection of bait-for-own-use

The fishery for bait-for-own-use is largely carried out under permit by fishers who will target tuna in fisheries managed by the Commonwealth. There is also some targeting of tuna within NSW jurisdiction that also uses bait gathered by lift nets. These bait gathering activities have always been constrained to three species; yellowtail, blue mackerel and pilchards. NSW

fishers using a lift net to gather bait have been required to report on bait used since 1997 but Commonwealth permit holders have had no reporting requirements.

This management strategy requires the development of a management system for bait gathering using purse seine and lift nets (see management responses 2.2e and 2.2f). This system must be negotiated with the resource harvest sectors and the Ocean Hauling MAC. The new policy will provide for the following:

- inclusion of permit holders in an appropriate code of conduct as a permit condition
- inclusion of permit holders in any observer programs required for the Class C (purse seine) sector
- development of an appropriate reporting system for permit holders to document all bait harvest
- a cap on the maximum number of permits that can be issued and a means of offering those permits by tender to all Commonwealth tuna fishers
- a means of adjusting the number of permits to reflect both the sustainability and environmental needs of the fishery as well as the demand for access to the resource
- refine the definition of the purse seine gear or other controls to reflect the need to collect live bait only and discourage the collection of baits that could be purchased from NSW class C (purse seine) fishers
- determination of the need and suitability of using lift nets in place of purse seine nets for bait gathering.

iii) Renewal of licences

Commercial fishing licences and fishing boat licences must currently be renewed annually. Fishers are sent renewal application forms approximately one month before the expiry date on the licence. If a commercial fishing licence is not renewed within 60 days of the expiry date on the licence, the renewal application is generally taken to be an application for a new licence. Additional fees apply to late renewal applications.

Abeyance period for fishing boat licences

Fishing boat licences can be held in abeyance for a period of up to two years from the date of expiry of the licence. Owners may also provide written advice that a boat licence is to be placed in abeyance. Fishing boat licence fees are not payable during the period of abeyance, but the full amount due is payable if the licence is reinstated within the two years specified.

iv) Appeal mechanisms

Fishers may lodge an appeal to the Administrative Decisions Tribunal (ADT) against a decision to refuse to issue or renew, suspend, cancel or place conditions on a commercial fishing licence (or an endorsement on that licence) or a fishing boat licence.

The main role of the ADT is to review administrative decisions of NSW government agencies. To lodge an appeal with the ADT, a request must first be made to NSW Fisheries for an internal review of the decision, then a written application should be lodged with the ADT no more than 28 days after the internal review was finalised.

The ADT can make various orders concerning an appeal application including:

- upholding the original decision
- reversing the decision completely or in part
- substituting a new decision for the original decision
- ordering the agency to reconsider the decision in light of the ruling.

For further information, refer to the *Administrative Decisions Tribunal Act 1997* or the following website: <http://www.lawlink.NSW.gov.au/>

v) **Nomination policy**

The three sectors of the Ocean Hauling Fishery are subject to two separate policies in relation to nominations. Under the current general nomination policy, if the owner of a ocean hauling fishing business is eligible for a class C (purse seine) endorsement, the owner may nominate another person to take fish on behalf of the business.

Clause 212N of the *Fisheries Management (General) Regulation 2002* provides for short term nominations for those commercial fishers holding either class A (skipper) or class C endorsements in cases of sickness or other extenuating circumstances.

Following the implementation of the ocean hauling transfer guidelines in April 2000 for businesses with either class A or class B (crew) endorsements, long term nominations are permitted in these sectors of the Ocean Hauling Fishery provided the fishing business meets the criteria set out in the transfer guidelines for the appropriate class of endorsement. This includes the requirement for people without sufficient experience in the fishery to operate in a crew position for a two year period.

In all cases, if a person nominates another fisher to take fish on their behalf, that person forgoes their right to fish (under all endorsements) while the nomination is active.

vi) **Training licences**

Entry into the commercial fishing industry under “father and son” arrangements was replaced in 1995 by clause 135 of the *Fisheries Management (General) Regulation 2002* which provides for trainer and trainee fishing licences.

“Sons” (can include daughters) who have continued in the industry with their ocean hauling endorsements remaining attached to their father’s fishing business (under the old father and son arrangements), can maintain their ocean hauling endorsement. Should “sons” decide to transfer their ocean hauling endorsements, they may be transferred separate to the “father’s” fishing business. Like all other ocean hauling fishers, however, the availability of the endorsement to a new owner upon transfer is subject to the relevant transfer criteria.

Licences are now available to eligible persons for the purposes of training a new entrant to the commercial fishing industry. There are two types of training licence currently available:

Trainer’s licence: The seller may apply to continue to hold his/her fishing licence for up to one year from the next fishing renewal date, to work with the purchaser of the fishing business for training purposes (but the business must qualify as a RFO), subject to the entitlements of the fishing business, on the understanding that the licence is

surrendered at the end of the one year period unless a further RFO or relevant number of shares specified in the share management plan is acquired which is not the original business.

Trainee licence: Within six months of acquiring a RFO a new entrant may request that the RFO be placed into abeyance whilst the owner works with an experienced fisher to gain the necessary skills. This arrangement may apply for a period of up to two years. Fishing methods which the new entrant can use are restricted to the entitlements held by his or her fishing business. Areas which can be worked by the new entrant are limited to areas included in the purchased RFO and areas of historic operation of the experienced fisher.

vii) Net registration

Commercial fishing nets used in the Ocean Hauling Fishery are required to be registered. Net registration certificates are issued for individual nets and are valid for the life of the net. The certificates stipulate the length and mesh sizes of individual nets.

New (i.e. additional) net registrations have not been issued since a freeze was placed on the registration of new nets in July 1989 and will not be issued under this management strategy.

Net registrations are not transferable and are only issued for new nets that are replacing existing nets that are no longer serviceable, and must be of the same specifications. Where nets are acquired as part of the transfer of a fishing business (or share transfers), only the nets authorised for use by the new owner's entitlements will be registered. All current arrangements relating to net registrations will continue under the management strategy (refer to management response 2.2h).

viii) Controls on fishing gear and boats

Detailed restrictions relating to the dimensions and type of fishing gear are set out in Regulation. The Regulation provides for the use of 'standard' gear in most areas, but a clearer definition of the prescribed gear in the fishery with amendments is provided in Appendix 2 (see management response 2.1c). Appendix 2 also stipulates in many cases how the gear must be operated. This management strategy will continue the prohibition of individuals interfering with fishing gear set by commercial fishers as provided for under clause 107 of the Regulation (see management response 2.2h). The current regulations relevant to the Ocean Hauling Fishery will continue, subject to any changes necessary to implement this management strategy.

Engine controls

In early 1997 an attempt to cap escalating effort was made by instituting a closure which limited beach-based ocean hauling fishers to using an engine unit of not more than 45 horsepower. There is concern that some fishers who have complied with the wording of the closure, but not the intent, and have installed higher capacity engines, receiving an unfair advantage over those who have genuinely reduced the power of their boats engines to comply with the closure. Management response 2.2c in section 8 of this management strategy aims to improve management controls for the engine size on licensed fishing boats in the beach fishery.

Code of conduct

It is now a licence condition of an ocean hauling endorsement that the commercial fisher complies with a code of conduct, which is approved each year before the winter period. Penalties apply for non-compliance.

The code of conduct covers issues like vehicle speed limits on beaches, use of agreed access points, avoiding environmental damage and incorporates local arrangements with Councils. It is reviewed and where necessary amended each year in consultation with the Ocean Hauling MAC and in response to issues that arise relating to the operation of ocean hauling businesses (see management response 4.5b in section 8 of this management strategy). The management strategy includes the development of a code of conduct, enforceable by conditions on licences, for the purse seine sector of the Ocean Hauling Fishery (see management response 4.5c).

ix) Transfer policies

Transfer of licensed fishing boats

The majority of licensed fishing boats used in the Ocean Hauling Fishery are small vessels that have been classified as “general purpose” boats. Boats in this category do not carry validated catch history and can be transferred separate to the other entitlements of the fishing business. In general, boats have been categorised as general purpose vessels where the fisher, rather than the boat, was considered to be the predominant unit of fishing effort.

On the other hand, boats that are categorised as “boat history” vessels cannot be transferred separate to the fishing business. The Licensing Branch can advise a fishing boat owner whether a boat has been classed as a boat history or general purpose vessel. Any transfer of a fishing boat licence must first be approved by the Director, NSW Fisheries.

Transfer of fishing business entitlements

Commercial fishing licences and endorsements to participate in a fishery are not freely transferable. The transfer guidelines, implemented in April 2000, specify whether a new fishing business owner is eligible to hold a class A (skipper) or class B (crew) ocean hauling endorsement upon transfer of the business. Additionally, where the new owner is eligible for a class A endorsement, the guidelines outline the net authorities available upon transfer. An outline of the current transfer policy is contained within section 5(b)(vii) of Chapter B of the Ocean Hauling EIS.

While the class A and B sectors are subject to the new transfer guidelines, the class C (purse seine) sector of the fishery remains subject to that part of the Licensing Policy known as the “interim transfer policy”. The interim transfer policy currently provides that the class C endorsement of a fishing business will only become available to the first new owner of the business. If the business is transferred for a second time, the offer to retain the class C endorsement lapses.

These transfer arrangements will be superseded through the implementation of share management provisions and minimum shareholdings for the fishery upon the commencement of the share management plan.

National licence splitting policy

The Commonwealth and the State Governments have a long standing nationally agreed policy in place on licence splitting. The policy prevents entitlements held by one person or entity and issued by more than one jurisdiction, from being split and transferred separately. The transfer of a fishing business will not be approved unless all entitlements issued to the business by other jurisdictions are also transferred to the same buyer, or surrendered, or the approval of all agencies involved has been obtained.

Where fishing effort has been historically 'shared' across a number of entitlements held by a person, the policy prevents the increase in effort that would occur by creating two separate entitlements that could operate at full capacity.

This fundamental component of the Licensing Policy will be retained under this management strategy.

x) Time and area closures

The *Fisheries Management Act 1994* provides for the use of fishing closures in the Ocean Hauling Fishery to, among other things:

- protect and conserve areas of key habitat
- manage the amount of fishing effort in an area/region
- manage conflicts between stakeholders over the use of the resource and to ensure it is equitably shared
- minimise bycatch and the impacts of the fishery on threatened and protected species.

Fishing closures can be established on a seasonal, time, area, operator or gear specific basis. There are numerous fishing closures in place in NSW which limit fishing in the Ocean Hauling Fishery. Appendix 3 outlines the closures that impact on ocean hauling operations. The existing fishing closures will remain until reviewed and new closures will be developed in accordance with section 8 of this management strategy (refer to management response 4.5a).

Fishing closures are normally published in the NSW Government Gazette, however if the Minister for Fisheries considers that a fishing closure is required urgently, the Minister may introduce the closure and advise the public through media outlets and by displaying prominent signs in areas adjacent to the waters affected. In the case of an urgent closure, the Minister is to publish the closure in the Government Gazette as soon as practicable.

Zoning

The intention of the zoning scheme in 1995 has limited fishers' operations to one of seven regions along the NSW coastline (See Map 1). At that time, exemptions to the zoning rules were provided to boat-based garfish haulers who were identified as 'historical travellers' and all purse seiners as conflict in those boat-based sectors was less common at the time.

In addition to promoting harmony in the fishery, zoning focuses management and research on regional aspects of the biological, social and economic issues affecting the fishery. Local issues can be addressed in a way that meets the requirements of local groups within a state-wide framework.

The zoning scheme will continue under the management strategy, with the incorporation of all boat-based garfish haulers into the scheme (see management response 2.5f in section 8 of this management strategy). Class C endorsement holders will not be restricted to individual zones under the management strategy.

Other regional arrangements

In 1995, committees were established on a regional basis to address the issues of equitably sharing resources amongst beach users. The outcome was expected to reduce social conflict and fine tune aspects of the fishery rules in each of the seven regions. NSW Fisheries chaired committees to ensure all relevant groups were represented and the local agreements would be enforced. The committees represented local people considering local issues and arriving at local solutions. Specifically, the committees included representatives from local councils, National Parks and Wildlife Service, recreational fishers, and a variety of community groups.

The specific areas addressed by the regional liaison process include:

- identifying and mapping traditional hauling grounds along beaches (assisting in the development recognised fishing grounds as defined in the *Fisheries Management (General) Regulation 2002*)
- nominating beach closures for commercial ocean hauling (to reduce social conflict)
- making local amendments to the code of conduct
- identifying the main species targeted in each region.

Draft recommendations from the process and were submitted for regions 1 to 4 and region 7, but draft recommendations were not pursued for regions 5 and 6 due to conflict within the commercial fishing industry in these regions at the time. The management strategy provides for the implementation of the agreements made in 1995 and the initiation of the process for regions 5 and 6.

Recognised fishing grounds

Section 39 of the *Fisheries Management Act 1994* and clause 105 of the *Fisheries Management (General) Regulation 2002* provide for the declaration of waters used for net fishing by commercial fishers as recognised fishing grounds (RFGs). The management strategy provides for the development of recognised fishing grounds in consultation with the community. These areas may include areas of sea or estuaries that have been used historically for net fishing or are used regularly or intermittently for net fishing by commercial fishers (see management response 4.5d).

Recognised fishing grounds aim to reduce conflict between user groups by clearly defining the specific areas which have traditionally been used by commercial fishers to take fish and giving priority to commercial fishers in those areas. Priority in areas that have not been declared a RFG will be based on whoever is present at the site first.

Recognised fishing grounds have two purposes:

- (1) commercial fishers may request a person to remove anything that has been placed or left by the person, without lawful excuse, and which is obstructing the lawful use of the net fishing activities of the commercial fisher
- (2) commercial fishers using nets have priority over recreational fishers in the waters defined as RFGs. Boats, surf craft or similar equipment are not allowed to cause the dispersal of schooling fish or fish travelling in a school.

The implementation of RFGs does not mean commercial fishers will be excluded from areas that have not been declared a RFG nor does it provide an additional property right in the fishery, they merely provide priority for access to particular areas. Additionally, just because an area has been declared a RFG, it does not prevent a lawful obstruction, such as a jetty or mooring being constructed. The declaration of a RFG, however, will provide useful information for local Councils and other State agencies when considering development applications and the impact on other user groups.

The process of declaring RFGs will involve broader stakeholder input. The initial step will be identification of possible sites by the Ocean Hauling MAC, having regard to guidelines approved by the Minister for Fisheries. Once these sites have been identified, they will be presented to the other relevant advisory councils such as the Advisory Council on Recreational Fishing for consideration, prior to a period of public comment. The Ocean Hauling MAC, prior to final recommendations being submitted to the Minister, will consider any comments made by the community.

Once the management strategy is finalised, it will be up to the Ocean Hauling MAC to decide on the extent and scope of any implementation program for RFGs in their fishery. The implementation program will need to be financed by an industry contribution determined on advice from the MAC.

xi) Permits

Section 37 of the *Fisheries Management Act 1994* allows for permits to be issued for research or other authorised purposes. These permits provide a legal framework for activities that fall outside normal operating rules set out in the Act or its Regulation. Each permit sets out a number of conditions, which vary depending on the purpose of the permit. These conditions ensure that permits are used only for the purpose intended by their issuing and are often used to limit the extent of the permitted activity.

Permits will be issued to authorise modified fishing practices to assist approved research programs or for purposes consistent with the vision and goals of this management strategy (see management response 6.4b in section 8).

Permits are valid for the period specified in the permit, and may be suspended or cancelled at any time by the Minister. Permits are not transferred and are valid only insofar as they do not conflict with approved determinations of native title made under the *Commonwealth Native Title Act 1993*.

xii) Catch limits or quotas

Section 9 of this management strategy lists trigger points and allowable commercial catch levels for target species in this fishery. The upper catch trigger level for the commercial catch of each of these species has been determined using the upper trigger point range and recorded annual landings.

In addition to those limits, a daily bycatch limit applies to Australian salmon taken north of Barrenjoey Headland to the Queensland border, and tailor taken in all NSW waters taken by commercial fishing nets as follows:

Table 13. Catch limits that apply to species taken in the Ocean Hauling Fishery.

Commercial fishing activity	Daily possession limit per species (kg)
Hauling crew	100
Meshing crew (or individual)	50
Any other licensed commercial fishing vessel containing a commercial fishing net	50

This daily trip limit will continue to apply under the management strategy (see management response 4.1b), in addition to the 20% shot-by-shot restriction that will apply on the capture of byproduct species (see management response 1.3a). Other species based catch controls such as size limits and protected fish are discussed in section 3(c) (iii-iv) of this management strategy.

xiii) Seafood safety programs

Food safety programs which relate to the Ocean Hauling Fishery, are administered by SafeFood Production NSW under the *Food Act 1989*. Food safety programs for all commercial fisheries are currently being prepared by SafeFood Production NSW and will continue under the management strategy (see management response 5.4a).

xiv) Cost recovery policy

NSW Fisheries recoups costs that are attributable to industry through a cost recovery policy. Cost recovery is a common principle among Australian commercial fisheries and an important component of ecologically sustainable development.

NSW Fisheries is in the process of implementing cost recovery in a progressive manner, so that all charges are not passed on to industry immediately. The FM Act requires that in a share management fishery, the fees payable must be paid in proportion to the shareholdings in the fishery.

In November 2000, the Government announced a new cost recovery policy. As part of the second reading speech for the *Fisheries Management and Environmental Assessment Legislation Amendment Act 2000*, the Minister for Fisheries, the Hon. Eddie Obeid, gave the following commitment for the fisheries that were moving to category 2 share management fisheries:

“Over the next five years the Government will develop and implement a cost recovery framework for category 2 share management fisheries. This framework will be subject to extensive industry consultation.”

“During this period, the total amount of money collected for NSW Fisheries, for its existing management services, will not increase without the support of the relevant management advisory committee.”

“After five years, the costs that have been identified as attributable to the industry will be progressively introduced over a further three-year period.”

It is important to note that the new services required to be implemented under the management strategy or as a result of the environmental assessment process will need to be fully funded by the fishery participants.

A range of regulatory and administrative fees are payable by fishing business owners in the Ocean Hauling Fishery. The management strategy does not, in itself, set the charges, or limit or otherwise govern the way fees are charged.

5. Compliance

NSW Fisheries has approximately 90 fisheries officers responsible for coordinating and implementing compliance strategies in NSW. These strategies include:

- maximising voluntary compliance
- providing effective deterrence for offences
- providing effective support services.

Approximately 65 of these fisheries officers are located in areas along the NSW coast where the Ocean Hauling Fishery occurs. Their general duties include conducting patrols, inspecting commercial fishers and their gear, and recording rates of compliance.

A compliance strategic plan is to be developed that will provide the direction for education, advisory and enforcement services provided by NSW Fisheries for the Ocean Hauling Fishery (see management response 6.1a in section 8 of this management strategy).

To ensure that compliance service is delivered in a consistent manner, quality inspection guidelines are being developed as part of this operational plan for inspections within the Ocean Hauling Fishery. These guidelines will set out a procedural approach to be adopted when undertaking inspections of fishers and fishing gear in the Ocean Hauling Fishery. The quality inspection guidelines will ensure that all issues requiring compliance by commercial fishers under this management strategy are subject to a compliance program, including the enforcement of byproduct rules that apply to the fishery.

A penalty points system

A penalty points scheme linked to endorsement suspension and share forfeiture provisions will be introduced under the management strategy and developed as part of a share management plan for the Ocean Hauling Fishery (see management response 6.1b in section 4).

The Ocean Hauling Fishery generally has a high compliance rate, however, despite the relatively large number of potential offences and the maximum penalties specified in the FM Act and Regulation, there are still a small number of ocean hauling fishers who operate beyond the rules. This minority continue to breach the rules applying to the fishery possibly and the courts sometimes appear unwilling to impose significant fines (which may be viewed as minor when compared to other criminal offences). The penalty points system is a way of providing a clear deterrent to fishers who are considering breaching the provisions of the management strategy or associated rules, as well as providing the courts with a regulated management plan that reflects the serious nature of some fisheries offences.

Similar to the motor vehicle licence demerit points scheme works (administered by the Roads and Traffic Authority), the system would provide for a list of penalty points assigned to serious or repeated offences. If a fisher accrued a certain level of penalty points by breaching the rules applying to the fishery, the endorsement or fishing right would be subject to predetermined periods of suspension or cancellation through provisions in the share management plan for the fishery.

The offences deemed as “serious” and the definition of a “repeated offence” would need to be included in the share management plan, as would the points attributable to each offence.

6. Research

a) Proposed research areas

Stock assessment of key species

The monitoring of commercial catches forms the full or partial basis for stock assessment of all species targeted by the Ocean Hauling Fishery. Generally, catch is not an ideal index of stock abundance because it can be influenced by factors unrelated to fish availability. To generate a more reliable index of abundance, catch can be standardised by fishing effort and reported as catch per unit effort (CPUE), however, fishing effort within the Ocean Hauling Fishery is difficult to quantify and has been reported ambiguously in the past. As a consequence, CPUE cannot currently be determined with confidence for most target species within the fishery. Changes in the methods of reporting of catch and effort by ocean hauling fishers, however, will improve the quality of this data, and may provide an index of stock abundance in the future (refer to objective 8.2 and associated management responses).

The quality of catch and effort data from the Ocean Hauling Fishery be improved via the use of daily logbooks. Logbooks will be designed in consultation with industry and will allow fishers to report daily catch and effort, including number of shots completed and hours of search time per day (see management response 8.2d). It is intended that the performance of logbooks will be tested in a pilot study in 2003 and, if appropriate, be fully implemented across the fishery soon after. In conjunction with the logbook, a daily 'spotting' diary is also included (see management response 8.2e). This will allow fishers to record all fish observed, including fish not captured. Beach hauling fishers are uniquely positioned to provide detailed information about the abundance of fish in coastal waters. Fishers are highly skilled at estimating the composition and size of schools, and spend many hours observing the movement of fish along the coast. Since the fishery operates along the length of the NSW coastline, ocean hauling fishers can potentially function as a network of observers, providing details of coastal fish movement and abundance that are comprehensive in time and space. Such observations could provide estimates of abundance for many target species, including a spawning stock abundance estimate for sea mullet. This information could be obtained at a fraction of the cost of fishery-independent surveys of the same fish stocks, but is dependent on the accurate and honest reporting by commercial fishers.

Age-based assessments are a significant improvement on assessments that are based on the monitoring of catch and effort alone. When used in conjunction with an appropriate measure of CPUE, the age composition of landings provides a strong basis for stock assessment. Sufficient funding is currently available to NSW Fisheries researchers to conduct age-based assessments for sea mullet and bream only. Methods for these assessments were established with external funding assistance (Virgona *et al.*, 1998; Gray *et al.*, 2000). A three year Fisheries Research and Development Corporation (FRDC) funded project to investigate the biology and fishery of eastern sea garfish, including the development of ageing techniques, commenced in late 2001. In the future, age-based assessment should be introduced for other target species in the fishery, especially relatively long-lived species such as yellowtail and silver sweep. Estimates of the age composition of yellowtail and blue mackerel were made in 1996-1997 (Stewart *et al.*, 1998).

It should be acknowledged that fishery-dependent information about stock structure will frequently be limited because of the selectivity of fishing gear. Ideally, assessment should include fishery-independent monitoring of stock abundance and structure. There is potential to independently monitor the abundance of some target species within the fishery. For example, aerial surveys of migrating sea mullet, or acoustic surveys of baitfish, may be possible, however, independent monitoring of many species may prove to be prohibitively expensive.

Relative abundance indices for many important species in the Ocean Hauling Fishery will become available as part of the fishery-independent survey included in the Estuary General FMS. The stock assessment process for these species will greatly benefit from that survey and the flow of benefits will accrue to all sectors harvesting these species.

Two significant issues affecting stock assessment of species targeted by the Ocean Hauling Fishery are as follows :

- (i) Stock assessment of sea mullet is rudimentary because of the lack of a reliable abundance index. This is despite sea mullet landings being the highest in quantity and value of all finfish species caught and managed in NSW. If spawner abundance can be determined from data provided by new logbooks, total stock abundance could then be estimated if the proportion of spawners in the population was known. Analysis of microchemical 'migration markers' in otoliths could potentially reveal the proportion of spawners in a given year.
- (ii) Landings of yellowtail reported by ocean hauling fishers (mainly purse seine) have increased considerably over the last decade and are currently approximately 500 tonnes annually. The other key baitfish species, blue mackerel, is caught in similar quantities. Significant under-reporting of baitfish landings by fishing sectors outside the Ocean Hauling Fishery, including recreational fishers and Commonwealth fishers, currently hinders assessment of these species. Catch composition of all sectors, including the Ocean Hauling Fishery, is poorly documented. Evidence from New Zealand, and limited evidence from eastern Australia, suggests that both species may live for 20-30 years off NSW (Stewart *et al.*, 1998).

Priority ranking for assessment of target species in Ocean Hauling Fishery

Below are the target species for the Ocean Hauling Fishery listed in order of priority for stock assessment. The Ocean Hauling Fishery team has assigned priority according to:

- i) size of catch level and value within the fishery
- ii) trends in total and fishery catch
- iii) biological knowledge
- iv) the extent to which it is targeted by other fisheries.

For example, by these criteria, silver trevally is given a medium priority, despite serious stock concerns, because it is mainly targeted by the Ocean Fish Trawl Fishery and Ocean Trap and Line Fishery.

As another example, Australian salmon is given a medium priority, despite lack of concern about the stock, because the Ocean Hauling Fishery is the main fishery to target this species. In other words, assessment of this species is reliant on the priority given to it by the

Ocean Hauling Fishery. In prioritising this species, we also considered some management factors.

1. **Sea mullet.** Very high catch level and value in the Ocean Hauling Fishery. Recent decline in catch.
2. **Sea garfish.** Very serious catch decline in NSW. High value in the Ocean Hauling Fishery prior to decline. Not significantly targeted by other fisheries. Limited knowledge of biology.
3. **Yellowtail.** High value and catch in the Ocean Hauling Fishery. Stable recent catch level. Potentially significant quantities taken by other fisheries resulting in uncertainty about total catch levels due to non-reporting. Limited understanding of biology. Long-lived species. Catch allocation issues exist between fishing sectors and information required prior to further development of target fisheries.
4. **Sweep.** Serious catch decline in NSW. Moderate value in the Ocean Hauling Fishery. Not significantly targeted by other fisheries. Limited knowledge of biology. Long-lived species.
5. **Blue mackerel.** High value and catch in the Ocean Hauling Fishery. Stable catch level. Potentially significant quantities taken by other fisheries but uncertainty about total catch levels due to non-reporting. Impact by Commonwealth Small Pelagic Fishery on older fish may be significant. Limited understanding of biology. Probably a long-lived species. Catch allocation issues exist between fishing sectors.
6. **Pilchards.** Very serious catch decline in NSW, at least partly due to environmental factors (massive fish kills due to virus). Short-lived species. High value in the Ocean Hauling Fishery prior to decline. Not significantly targeted by other fisheries.
7. **Silver trevally.** Very serious catch decline in NSW. However, low value and catch level in the Ocean Hauling Fishery. Much higher value and catch in other fisheries. High priority for cooperation in an assessment coordinated by the major targeting fisheries.
8. **Australian salmon.** Historically high value and catch level in the Ocean Hauling Fishery. Not significantly targeted by other commercial fisheries. Stable catch level. Moderate understanding of biology. Significant recreational fishery and so catch allocation issues exist between fishing sectors.
9. **Bream.** Catch decline in NSW, but this is associated with a decline in effort. Stable catch level and high value in the Ocean Hauling Fishery. Higher value and catch in other fisheries. Relatively good understanding of biology.
10. **Luderick.** Slight catch decline in NSW, but stable in the Ocean Hauling Fishery. Moderate value and catch level in the fishery. Much higher value and catch in other fisheries.
11. **Sand whiting.** Moderate value and low catch level in the Ocean Hauling Fishery. Much higher value and catch in other fisheries. Stable catch levels.
12. **Dart.** Low value and catch level in the Ocean Hauling Fishery although catch level is increasing. Not significantly targeted by other commercial fisheries, but may be important to recreational fishers. Limited knowledge of biology. Some confusion in reporting, i.e. ocean hauling fishers may land several species currently reported as "dart".

13. **Sandy sprat (whitebait).** Low value and catch level in the Ocean Hauling Fishery, and not significantly targeted by other fisheries. Limited knowledge of biology. Short-lived species. Some confusion in reporting, i.e. ocean hauling fishers may land several species currently reported as “sprat/whitebait”.
14. **Anchovy.** Low value and catch level in the Ocean Hauling Fishery and not significantly targeted by other fisheries. Stable catch level. Short-lived species. Possible confusion in reporting, i.e. ocean hauling fishers may land several species currently reported as “anchovy”.
15. **Bonito.** Low value and catch level in the Ocean Hauling Fishery, although catch level is increasing. Much higher value and catch in other fisheries.
16. **Jack mackerel.** Low catch and value in the Ocean Hauling Fishery. Stable catch level in the fishery. Much higher value and catch in Commonwealth Small Pelagic Fishery. Moderate understanding of biology.

Quantification and reduction of landings of non-target species

Species targeted by the Ocean Hauling Fishery tend to occur in coastal waters as mono-specific aggregations. Consequently, fishing is highly targeted and landings of non-target species are small relative to other fisheries. In addition, species targeted by beach hauling fishers tend to occur as schools of mature fish and bycatch of immature/undersized fish is likely to be minimal. Most of the evidence for the above information is anecdotal, however, and the assumptions need to be tested by an independent scientific observer-based study.

Research to quantify and reduce bycatch from general purpose hauling nets has been conducted in NSW estuaries, however, the performance of this gear type has not yet been investigated in ocean waters. Bycatch and discarding by other gear types used in the Ocean Hauling Fishery are also yet to be assessed.

The management strategy provides for the establishment of an observer-based study to assess bycatch and discarding in the Ocean Hauling Fishery (see management response 1.1a). The study will examine the performance of hauling nets and purse seine nets. It is intended that observer surveys be repeated to assess new or modified gear types, but otherwise be repeated periodically (5-10 years) to provide a low level of bycatch monitoring. Particular bycatch or discarding problems that are identified by observer surveys will be addressed by further targeted research. This may include assessment of the utility of spatial and temporal fishing closures, and/or the development of alternative gear types and fishing practices.

Describing and minimising interactions between fishery and habitat

The impacts on ocean habitats by the Ocean Hauling Fishery are believed to be minimal, but have not been assessed by any scientific study. Habitats that could potentially be impacted include seagrass and algal beds, surf zones, intertidal zones, sand dunes and other beach access points. Physical impacts to these habitats may potentially arise from the use of nets, boats and vehicles by haul net fishers. Purse seine fishing is unlikely to significantly impact on coastal habitats.

An independent observer-based study will be used to identify any interactions between habitats and the fishery by cataloguing where and when the fishery uses different gear types.

Where interactions are identified, physical impacts on habitat can be assessed by targeted, short-term research, which may include manipulative field experiments (refer to management responses 1.1a, 8.1d and 8.1e). If a significant impact is found to occur, further targeted research will be conducted to develop alternative gear types and/or fishing practices that minimise the impact. Alternately, it may be more cost effective to implement small-scale closures that achieve the same objective.

There is a need for tools to monitor biodiversity in the ecosystem in which the fishery operates. The research needed to provide such tools is likely to be long-term and drawing on a variety of expertise and knowledge. The management strategy involves reforms in research and monitoring that will significantly improve the working knowledge of the fishery in its environment. These reforms, such as improvements in the accuracy of catch returns and the knowledge of discards from the observer study, will form the basis for future studies to assist biodiversity monitoring.

b) The Conservation Technology Unit

In March 2001 NSW Fisheries established a Conservation Technology Unit to examine conservation-based gear technology in commercial and recreational fisheries. This focussed research initiative will help address gaps in knowledge including the selectivity of fishing gear used in the Estuary General Fishery. The research will also assist in identifying the most appropriate gear to be used in the fishery and ensure that future changes to gear regulations can be based on accurate scientific information. The development of new and innovative fishing techniques will help minimise unwanted catches, discarding and environmental change.c)

c) Catch monitoring

The information collected on commercial landings assists in the ongoing monitoring and assessment of the status of fish stocks. The catch and effort information collected from commercial fishers has other critical roles in fisheries management including helping understand patterns of fishing activities and the mix of species from targeted and general fishing operations.

Under the management strategy, fishers in the Ocean Hauling Fishery will continue to be required to submit records on a monthly basis detailing their catch and fishing effort (see management response 8.2a). The information includes total landed catch for each species, the effort expended (for each method) to take the catch (i.e. days fished), and the area/s fished. Through the implementation of this management strategy, fishers will also use daily records based on teams during the mullet travelling season, which occurs between March to July. These daily records will provide a more accurate record of the total quantity of fish landed in the fishery, and reduce the possibility of the same catch being reported by a number of fishers within a hauling crew. These daily records will still, however, be submitted on a monthly basis. In addition to the daily recording of hauling crews, a facility will also be included so that crews can report on schools of fish that are observed travelling along the coast but where no shot was made by that crew to catch those fish. Further details regarding this recording system can be found in management response 8.2d and the background to that response. This information is to be entered onto a database by NSW Fisheries and will allow for analysis of fishing activity, catch levels and effort levels.

The accuracy of the data provided on catch returns, particularly with respect to fishing effort data, is often poor. There are a number of management responses included in section 8 of this management strategy to improve the quality and reliability of the information provided on the returns, including a review of the current catch return reports and validation of catch and effort data under the scientific monitoring program.

The entry of catch return information onto the database is subject to stringent quality control procedures including a three month timeframe for data entry following the receipt of a catch return by NSW Fisheries. A policy is being developed to manage the timely receipt and entry of commercial catch return data into the commercial catch records database.

To maximise the accuracy of the data collected on monthly catch returns a range of quality-control procedures are currently in place or scheduled for implementation in the near future. A brief synopsis of these quality control procedures is provided here:

- (i) Every return is scanned for errors when received by the "Commercial Catch Records" section and omissions and errors are queried with fishers (by phone and/or written correspondence) and corrected.
- (ii) Logical checks of data accuracy (range, consistency and validity checks) are performed automatically by computer during data-entry. Likely errors are queried with fishers (by phone and/or written correspondence) and corrected if necessary.
- (iii) Fishers who have not submitted catch returns in a timely fashion are being notified and requested to submit omitted returns and an ongoing procedure for dealing with missing returns is being developed.
- (iv) Data from the commercial catch statistics database "FINS" is regularly downloaded to a database "COMCATCH" which can be accessed/queried by biologists and managers responsible for individual fisheries. Subsequently, any problems with data identified by the responsible biologists/managers are queried/corrected by the commercial catch records section (consulting fishers if necessary).
- (v) A recent pilot survey was done to assess the accuracy of data entry. The results showed that data-entry errors by staff were of minimal significance. Errors were rare and generally concerned minor species. It is planned to repeat this survey annually to provide ongoing monitoring of the quality and accuracy of data entry.
- (vi) Following implementation of routine reporting of the quantities of fish handled by registered fish receivers in NSW (to commence during 2001-02), it will be possible to compare the quantity of catch (by species) reported by fishers on catch returns with the quantity handled by fish receivers in NSW. This will provide a cross-validation of weights of individual species caught and handled in NSW.
- (vii) The information collected on catch returns and options for improving the catch return forms (and increasing the reliability of data) is reviewed periodically by the management advisory committees and annually by the "Catch and Effort Working Group" which comprises industry representatives from each fishery. This working group was convened for the first time in April 2001.

All existing and proposed procedures attempt to maximise data quality. It is, however, inevitable that the accuracy of data supplied by fishers cannot be directly assessed and can sometimes be variable, particularly with respect to fishing effort data. Consequently, the commercial catch statistics supplied by fishers and maintained in the commercial catch records database is most accurately described as representing “reported landed catch”.

7. Consultation

There are a range of consultative bodies established in NSW to assist and advise the Minister for NSW Fisheries and NSW Fisheries on fisheries issues. There are committees that are established to provide advice on specific issues as well as bodies that advise on matters which cut across different fisheries or fishing sectors.

a) The Management Advisory Committee

Share management and major restricted fisheries in NSW each have a management advisory committee (MAC) that provides advice to the Minister for Fisheries on:

- the preparation of any management plan, strategy or regulations for the fishery
- monitoring whether the objectives of the management plan, strategy or those regulations are being attained
- reviews in connection with any new management plan, strategy or regulation
- any other matter relating to the fishery.

Table 13 details the current membership on the Ocean Hauling MAC. The industry members of the MAC comprise representatives that are elected by endorsement holders in the fishery (or shareholders in the share management fishery). There is an industry representative from each of the seven coastal regions in the fishery. The members hold office for a term of three years, however the terms of office are staggered and the terms of half of the industry members expire every 18 months.

The non-industry members on the MAC are appointed by the Minister for Fisheries and also hold terms of office for up to three years. To ensure that all issues discussed by the committee are fairly represented, the MAC is chaired by a person who is not engaged in the administration of the FM Act and is not engaged in commercial fishing.

Although the MAC receives advice from NSW Fisheries observers on research, compliance and administrative issues relating to the fishery, only members of the MAC have voting rights on the decisions of the MAC.

The actual composition and role of the MAC is set by the FM Act and its regulations and may be altered from time to time.

There are many references in this management strategy to consultation with the Ocean Hauling MAC. Consultation involves seeking the advice of the MAC on its views. The MAC generally meets at least twice a year- but many issues may require resolution urgently, and it may not be practicable to defer consultation to a face-to-face meeting. For this reason, references to consultation with the Ocean Hauling MAC in this management strategy may include the distribution of documents to members by a specific date. NSW Fisheries may then compile the comments received into a single document recording the views of MAC members. This document may then be used as a basis for further decision making by NSW Fisheries and/or the Minister for Fisheries.

Table 14. Membership on the Ocean Hauling MAC.

Position	Northern boundary	Southern boundary
Independent chairperson	-	-
Region 1 – Upper north coast	NSW / Queensland border	29°15'S Jerusalem Creek – south of Evans Head in the Bundjalung National Park
Region 2 – Clarence	29°15'S	29°45'S Sandon River – south of Yamba in the Yuragir National Park
Region 3 – North coast	29°45'S	31°44'S Diamond Head – south of Camden Haven in Crowdy Bay National Park
Region 4 – Central	31°44'S	33°25'S Wamberal Point – the entrance to Wamberal Lagoon north of Terrigal
Region 5 – Metropolitan	33°25'S	34°20'S Bulli Point at Bulli
Region 6 – Upper south coast	34°20'S	35°25'S Lagoon Head, Burrill Lake south of Ulladulla
Region 7 – Lower south coast	35°25'S	NSW / Victorian border
Recreational fishing	All areas	
Indigenous fishing	All areas	
Conservation	All areas	
NSW Fisheries	All areas	

b) Ministerial Advisory Councils

Four Ministerial advisory councils are currently established under the *Fisheries Management Act 1994*. The councils provide advice on matters referred to them by the Minister for Fisheries, or on any other matters the councils consider relevant. They report directly to the Minister.

The Ministerial Advisory Councils currently established are:

- Advisory Council on Commercial Fishing (ACCF)
- Advisory Council on Recreational Fishing (ACoRF)
- Advisory Council on Fisheries Conservation (ACFC)
- Advisory Council on Aquaculture (ACoA)

The Ocean Hauling Fishery and each of the other major share management and restricted fisheries have representatives on the ACCF. These representatives are nominated by each of the respective management advisory committees and appointed by the Minister.

Representatives from the commercial fishing industry in NSW, or people who in the opinion of the Minister have expertise in commercial fishing are also represented on the ACFC.

The name and composition of the Ministerial advisory councils are determined by regulations under the FM Act and may be altered from time to time.

c) Fisheries Resources Conservation and Assessment Council

The FRCAC has been established to play a key role in advising the Government on fisheries conservation and assessment throughout the State. The members on the council represent a wide range of interests and includes representatives from commercial fishing, recreational fishing, fish marketing, the fishing tackle industry, charter boat fishing, regional tourism, academic expertise, conservation, aquaculture and Indigenous peoples.

The FRCAC advises the Minister for Fisheries on the preparation and revision of fishery management strategies for fishing activities, including this strategy for the Ocean Hauling Fishery.

The legislative role of the FRCAC includes providing advice on:

- the preparation or revision of a fishery management strategy (and for that purpose to review the environmental impact statement prepared in connection with a draft fishery management strategy)
- other matters as may be referred to it by the Minister.

In summary, the FRCAC's duties involve:

- fostering relationships between community groups, recreational fishing interests, commercial fishing interests and government agencies
- advising on the preparation and revision of fishery management strategies
- reviewing environmental impact statements prepared in connection with draft strategies
- providing an opportunity for key stakeholder groups to have input into issues papers prepared for RFH selection processes
- reviewing community consultation reports that arise from the RFH selection process.

Both the FRCAC and the ACCF are consultative bodies that facilitate cross-sectoral and cross-fishery consultation, respectively.

The composition and role of the FRCAC is set out by the FM Act and its regulations and decisions made by the Minister for Fisheries. These arrangements may change from time to time.

d) Total Allowable Catch Setting and Review Committee

A Total Allowable Catch Setting and Review Committee is established under the FM Act, however, currently does not consider matters directly relevant to the operation of the Ocean Hauling Fishery.

8. Goals, Objectives and Management Responses

a) A model framework

This section sets out the goals, objectives and management responses for the Ocean Hauling Fishery.



Figure 1. A model of the framework for a fishery management strategy.

The link between the goals, objectives and management responses is not as simple as that portrayed in Figure 1. The reality is that most management responses assist in achieving more than one goal.

A fishing closure is one example of the complex relationships that exist in a multi-method multi-species fishery. Some closures were originally put in place to more fairly share access between recreational and commercial fishers. A closure to reduce conflict appears to fit into the “resource sharing” goal, however, it can have other benefits, and assist the fishery to meet other objectives.

For example, a closure can also reduce the level of fishing pressure in that area and provide greater protection to habitat and biodiversity. This outcome provides a range of benefits for the fishery over and above reducing conflict (see Figure 2).

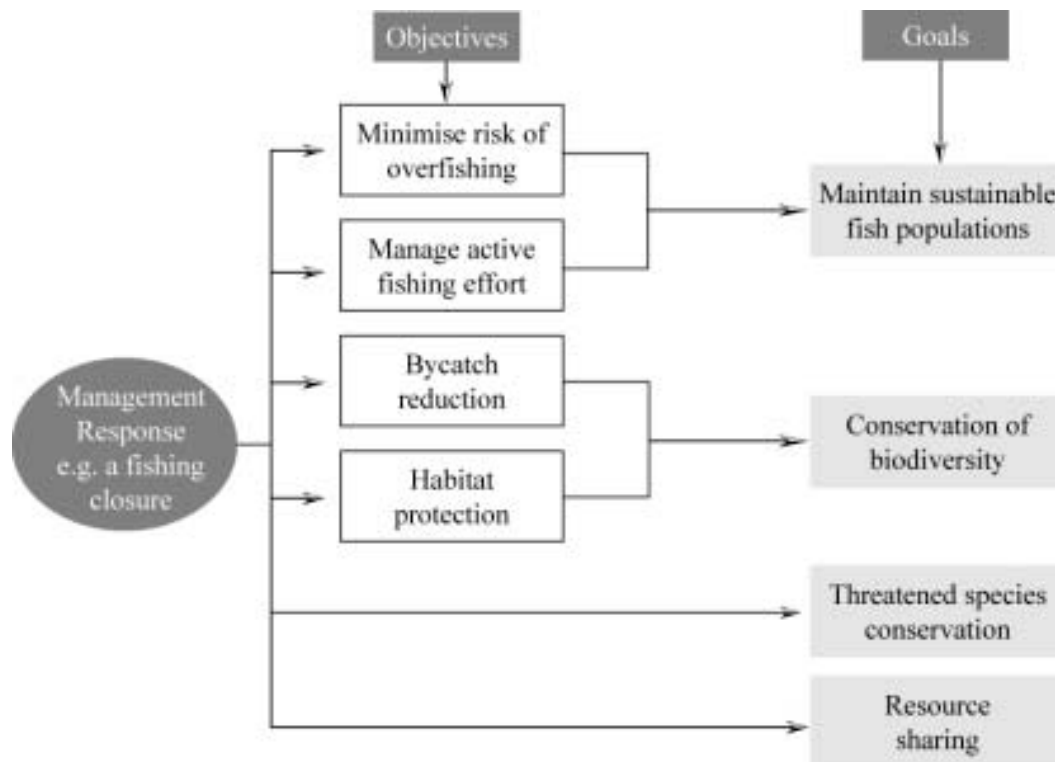


Figure 2. Example of how a single management response affects multiple goals and objectives.

This complex structure has been dealt with under this section by listing each of the management responses once only, under the objective that the response contributes most towards achieving. There are cross references between each response and the other goals and objectives that the response may also assist in achieving. When identifying the responses that are in place to achieve a particular objective, it is important to look at the cross referenced responses as well as any listed individually under the objective (i.e. the “Other important responses” must be taken into account).

Information under each response is also provided detailing the timeframes in which the action will be undertaken, the agency or group responsible for implementation and the authority under which the action will be implemented.

b) Goals, objectives and management responses

GOAL 1. To manage the Ocean Hauling Fishery in a manner that promotes the conservation of biological diversity in the coastal environment

The impact of the fishery on non-target species and the environment includes impacts on bycatch (i.e. discards) and byproduct species, impact of fishing gear on sensitive habitats and interactions with threatened or protected species. Levels of bycatch in the Ocean Hauling Fishery have also not been formally described but are anecdotally thought to be low.

Much of the fishing in the fishery takes place in either open water or on beaches where impacts of fishing on habitats have not been described but are also thought to be low.

Objective 1.1 To minimise the impact of fishing activities on non-retained species (including prohibited size or unwanted species)

Other important responses: 2.1c; 2.2b,h; 4.1b; 4.5a–c

(a) Design and implement an industry-funded study using scientific observers to achieve the following objectives:

- i. document rate and species composition of bycatch for each gear type in the fishery
- ii. estimate the accuracy of reporting using standard catch returns including both the quantity caught (and released) and the identity of the species recorded (including threatened and endangered species).
- iii. document the interaction with ocean hauling fishing methods on fish habitats and on threatened species

Background: There are no quantitative data on rates of discards, non-target capture, habitat impacts or catches of threatened species. All of these are thought to be very low for all methods in the Ocean Hauling Fishery. Despite the expectation of low risk, the observer study will identify, during the design phase, the areas of highest risk concerning impacts on habitats, threatened species and the likelihood of bycatch. The distribution of species of concern and of sensitive habitats must also be used to assist in arriving at the design of the observer study. The observer study should be focused in such a way as to generate information to provide appropriate priority setting for new research programs (see responses under objective 8.1).

There are a number of areas that could initially receive focused attention from the observer program. Initial studies on purse seine fishing could focus on areas where interaction with penguins are thought to be likely. Fishers with small catches of reef-associated species could be an appropriate place to commence observation of the general purpose and purse seine nets. The general purpose hauling net targets fish with minimum size restrictions and it may be most appropriate to focus on the capture of undersize fish as a matter of priority. Having regard to the range of areas on which the study may

focus, the observer program will include a pilot study to determine the best use of available resources. Another outcome of the observer program will be the collection of data on spatial overlaps of interactions (if any) between the Ocean Hauling Fishery and threatened species. Further information on the scientific observer program is presented in Section 6 of this management strategy.

A further output from the observer study will be data that can be used to calculate relative mesh selectivity among the fishing gears being observed. A demonstration of low rates of bycatch will provide great substance to the parts of the management strategy that seek to minimise impacts on species other than target species. If the program proves these issues to be incidental in the Ocean Hauling Fishery, there will be no need to keep the program ongoing and repeat estimates will only be needed periodically or when a change in gear or practice necessitated new information.

The observer program will be designed and costed in full consultation with the Ocean Hauling MAC. The MAC may present alternative schemes and investigate competitive service delivery.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,3,4,7,8	From 2003	NSW Fisheries OH Fishers	Regulatory

- (b) Using best available knowledge and appropriate technology, modify fishing practices to reduce the impacts of the fishery on non-retained fish, invertebrates, reptiles, mammals and birds.

Background: The intention of this management response is to reduce the impact of the fishery on bycatch. Management response 1.2b is a related response which aims to reduce the impact of the fishery on aspects of the marine and terrestrial environment (over and above bycatch). The National Policy on Fisheries Bycatch provides a national framework for coordinating efforts to reduce bycatch. It provides options by which each jurisdiction can manage bycatch according to its situation in a nationally coherent and consistent manner. The independent observations of fishing practices generated by the observer studies will provide information to assist this process. The observer program will be repeated to assess new or modified practices, (or otherwise be repeated periodically) so as to ensure that best available knowledge and available technology is used within the fishery. Any changes to fishing practice that transpire under this management response could be implemented through conditions in the relevant fishing endorsement or through a code of conduct, depending on the nature of the change.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4	Current & ongoing reviewed every 3 years	NSW Fisheries OH fishers	Regulatory or Voluntary

- (c) Use best-practice techniques for the handling of incidentally captured organisms.

Background: Whilst there are no immediate controls to be introduced through the implementation of this management strategy, new techniques for handling incidentally caught organisms are often developed. Such techniques are often developed as an initiative of industry, or through research and development projects.

Options for handling techniques could include using techniques for sorting fish while still in the net by using escape grids, transparent panels or sorting pens, as appropriate. The independent observations of fishing practices generated by the observer studies will provide important information to assist this process. If the observer programs detect that handling techniques are not effective or could be improved, the management strategy allows for immediate review or modification of handling practices.

Contributing to Goals	Timeframe	Responsibility	Authority
1,3,4	Current & ongoing reviewed every 3 years	NSW Fisheries OH fishers	Regulatory Code of Conduct

- (d) Continue the restrictions on the use of fishing gear contained within the *Fisheries Management (General) Regulation 2002* including controls on the dimensions, construction materials and modes of operation (unless otherwise described by this management strategy).

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4	Ongoing	NSW Fisheries	Regulatory

- (e) Continue the prohibition on using firearms, explosives or electrical devices to take fish in the fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4	Ongoing	NSW Fisheries	Regulatory

Objective 1.2 To minimise the impact of activities in the fishery on marine and terrestrial habitat

Other important responses: 1.1a,e; 1.3d; 2.1c; 2.2b,h; 2.4a; 4.5a,b

- (a) The Ocean Hauling MAC will provide advice and contribute to reviews of the NSW Fisheries habitat management policy and guidelines or habitat protection plans, which aim to prevent or reduce impacts of all activities on aquatic habitats.

Background: Habitat management guidelines and plans have been and will continue to be prepared under the Fisheries Management Act 1994 to prevent or minimise the impact of all types of activities on fish habitat.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,6,7	Ongoing	NSW Fisheries OH MAC	-

- (b) Modify the use of fishing methods that have a detrimental impact on fish habitat, or threatened species populations or ecological communities.

Background: The intention of this management response is specifically to reduce the impact of the fishery on aspects of the marine a terrestrial environment (other than bycatch). Management response 1.1b is a related response which aims to reduce the impact of the fishery on bycatch. Where fishing methods are known to be having

detrimental impacts on juvenile fish or on threatened species etc., their use should be modified so as to avoid or minimise those impacts. Such modifications are provided for under this response and under management response 1.1b. The independent observations of fishing practices generated by the observer studies will provide important information to assist this process.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,6,7	Ongoing	NSW Fisheries OH MAC OH fishers	Various

(c) Continue the prohibition on damaging marine vegetation. Specifically:

- i) identify all areas where ocean hauling takes place over the seagrass *Posidonia australis* (strapweed)
- ii) prohibit the use of the general purpose hauling net in such areas.

Background: There is very little Posidonia in areas where ocean hauling takes place and it is not known what type of closure is most appropriate in each situation. Pelagic ocean hauling methods over deeper seagrass beds should not have an impact on Posidonia. To maintain consistency with the Estuary General FMS, the prohibition on the general purpose hauling on Posidonia is extended to the Ocean Hauling Fishery. This prohibition is a provision of the Fisheries Management (General) Regulation 2002.

Contributing to Goals	Timeframe	Responsibility	Authority
1,4	For point ii) by July 2004	NSW Fisheries	Regulatory

Objective 1.3 To reduce the likelihood of this fishery changing species, populations and ecological communities in a manner which threatens ecosystem integrity (i.e. composition and function)

Other important responses: 1.1a–e; 1.2a–c; 2.1a; 2.2b,c,e,f,h; 2.4a; 2.5a,b,h,i,j; 4.5a,b,c; 6.4a; 8.1b,c; 8.2a–e

(a) Limit species taken by each net type to those prescribed in Appendix 1 for each of the ocean hauling methods and include provisions for the landing of byproduct.

Background: The Fisheries Management (General) Regulation 2002 details the species to be taken by certain net types, such as a pilchard, anchovy and bait net, garfish net (bullringing) and lift net. Appendix 1 includes details of the species that may be targeted by each of the net types used in the Ocean Hauling Fishery. The appendix also provides the rules and provisions for dealing with byproduct for each method in the fishery, including the byproduct catch level rules for the fishery. Landing in excess of the relevant byproduct limit for any species in the fishery may result in a breach of the regulatory provisions applying to the gear type being used. In broad terms, each method in the fishery is restricted to a total catch of non-target species not to exceed 5% of annual landings. On a shot-by-shot basis, up to 20% of a shot is permitted to be non-target species. These restrictions will apply on a state-wide, regional and business basis.

Consultation will occur with the MAC in the future regarding restricting the range of byproduct species that may be taken in the fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4	July 2003	NSW Fisheries OH Fishers	Regulatory

- (b) Collaborate with other institutions (such as universities and other research facilities) to better understand the concepts of ecosystem function and the individual importance of harvested and other species populations, and ecological communities.

Background: There is no simple performance measure currently available to give an accurate representation of the impacts of the Ocean Hauling Fishery on biodiversity. Performance measures are needed for biodiversity impacts at the species, community and ecosystem levels. Careful thought must be given to deciding the most appropriate performance measure (and trigger points), so as to avoid expending resources unnecessarily on monitoring unrepresentative or inappropriate indicators. This will require substantial research over many years to determine the best approach and useful performance measures may be unavailable for some time. Collaboration among fishery management, scientific and stakeholder groups will be essential to the development of appropriate indicators. NSW Fisheries collaborates with universities and other institutions in a range of ways such as offering scholarships and in-kind contributions, collecting specimens and providing fish samples. An example of this collaboration is the joint research project being undertaken by NSW Fisheries and the University of British Columbia which is designed to look into whole ecosystem simulations.

Contributing to Goals	Timeframe	Responsibility	Authority
1,6,8	Ongoing	NSW Fisheries other institutions	-

- (c) Contribute to relevant biodiversity monitoring programs.

Background: There is no simple performance measure currently available to give an accurate representation of the impacts of the Ocean Hauling Fishery on biodiversity. Careful thought must be given to deciding the most appropriate performance measure (and trigger points), so as to avoid expending resources unnecessarily on monitoring unrepresentative or inappropriate indicators.

Contributing to Goals	Timeframe	Responsibility	Authority
1,3,6,8	Current & ongoing	NSW Fisheries	-

- (d) The Ocean Hauling MAC will have the opportunity to comment on the selection and ongoing management of marine protected areas in ocean waters.

Background: Numerous marine parks and aquatic reserves are being declared in NSW to protect and enhance marine and estuarine biodiversity. Three regions, Tweed-Moreton, Batemans Shelf and Lord Howe Province, have had marine parks declared.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,3,4,6,7	Current & ongoing	OH MAC	-

(e) Continue the prohibition on taking or selling declared 'noxious fish'.

Contributing to Goals	Timeframe	Responsibility	Authority
1	Current & ongoing	NSW Fisheries	FM Act

(f) Promote research on the impacts of the Ocean Hauling Fishery on the general environment, in particular, pursue the research priorities identified in section 6 of this management strategy.

Background: Like most fisheries around the world, direct effects of the Ocean Hauling Fishery are poorly understood and indirect effects are unknown. The direct impacts of ocean hauling methods on habitats and species of importance are thought to be low, but are not known. The early stages of the observer study will examine areas and methods thought to be of the greatest relative risk in the fishery in order to help determine the priority for further observer work and for any new studies needed to determine the direct impact of the fishery.

The Ocean Hauling Fishery needs to promote and support long-term research that aids understanding of the impact of the fishery in an ecological setting.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2, 3, 7, 8	Ongoing	NSW Fisheries OH MAC	-

Objective 1.4 To prevent the introduction and translocation of marine pests and diseases

Other important responses: 1.3e; 2.4b,c; 6.4a

(a) Implement, in consultation with the Ocean Hauling MAC, measures required in accordance with any marine pest or disease management plans.

*Background: The Minister for Fisheries or other authorities may alter management arrangements from time to time to minimise or mitigate the impact of marine pests and diseases. A recent example of an outbreak of disease was the mass mortality of pilchards across southern Australia, during which a system of closures and monitoring was implemented in NSW. Fishing closures were also introduced in 2000/2001 to prevent hauling in estuaries infested by the noxious weed *Caulerpa taxifolia*.*

NSW Fisheries has a pest program team which has three key responsibilities:

- *identifying pest species at high risk of establishment in NSW and developing pest incursion plans for those species*
- *conducting biodiversity surveys and assessing the potential impact of any identified alien species. Potentially high risk species would be recommended for listing as noxious under the FM Act*
- *developing appropriate control measures for noxious species and other established pests.*

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,6	Current & ongoing	NSW Fisheries OH MAC	To be determined

GOAL 2. To maintain fish populations harvested by the Ocean Hauling Fishery at ecologically sustainable levels

Ensuring that the species harvested by this fishery are fished at a level that minimises the risk of overfishing the stocks is vital. Because the fishery is managed by input controls, the key issue with respect to controlling the level of harvest is controlling the amount of fishing effort that is applied to the stock. Controlling fishing effort can include very specific measures such as regulating the size and dimensions of the fishing gear used, but at a broader level involves measures such as controls on the number of fishers who have access to (or are 'endorsed' to operate in) each part of the fishery.

A review of the operation of the Ocean Hauling Fishery conducted in 2001 as part of the environmental assessment process highlighted several risks with respect to possible shifts of effort into or within the fishery, and the relationship between an authority to fish and the way effort is applied in team-based methods. Other key issues that need to be addressed include the overfished status of garfish and silver trevally stocks and the need to promote stewardship over the fishery resources.

Objective 2.1 To ensure that the quantity and composition (e.g. size, age, sex) of species harvested does not result in overfishing

Objective 2.1.1 To maintain the stock of the target species: yellowfin bream, yellowtail, blue mackerel, sea garfish, luderick, sea mullet, pilchards, sweep, dart, jack mackerel, bonito, silver trevally, Australian salmon, sandy sprats (whitebait), anchovy and sand whiting at or above a level that minimises the risk of overfishing

Other important responses: 1.1a,b,d,e; 1.2a; 1.3a,d; 2.2a-f,h; 2.3a,b; 2.5a,b,f,h-j,l; 4.1a,b; 4.2a,b; 4.5a; 5.2d; 5.4b; 6.1a,b; 8.1b,c; 8.2a-e

(a) Monitor the quantity, length, age and sex composition of commercial landings of the target species of the Ocean Hauling Fishery.

Background: Information on the structure of the landed catch is essential for stock assessments. Length, age and gender monitoring is already undertaken for many of the target species at the Sydney Fish Market, other fish processors, and at point of landing throughout the State. The mandatory monthly catch and effort returns are used to collect information on the quantity of the commercial harvest. This monitoring provides a basis for cross comparison and validation of the size and composition of commercial landings, independent of mandatory returns. Monitoring done in this program also provides a valuable cross reference for the observer program in the form of estimates of landings structure and composition that can be compared with the same information generated by observers. It is important to note that monitoring of catch at the Sydney Fish Market and at other fish processors provides information about all commercial landings of species, as opposed to simply landings of those species by the Ocean Hauling Fishery. This monitoring is generally done on a weekly basis, and contributes toward determining the

status of stocks, stock assessment information and may also assist in determining appropriate measures for recovery programs where needed, including minimum legal size limits.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,7,8	Ongoing	NSW Fisheries	-

- (b) Develop stock assessments of target species within five years and ensure the assessments are reviewed every three years thereafter.

Background: Information to assess stock levels for target species is at different stages, from having recent major projects to having little information to include in an assessment beyond catch and effort information. It is intended that the quality of the information and the nature and quality of the stock assessment continually improve. Stock assessments for target species will allow a change from landings-based monitoring to the use of biological reference points for monitoring of stock status and fishery performance, and will provide for more accurate determination of sustainable levels of harvest for those species. It is important to note that stock assessments are done on a species basis and are therefore reliant on harvest estimates from all sectors.

Because stock assessments are done on a species basis they are reliant on obtaining harvest estimates from all sectors and adjacent jurisdictions. Future fishery-independent survey work will contribute more robust data that can be factored into the stock assessment process. A stock assessment process will be designed within 12 months of the management strategy commencing.

The ongoing three year review of stock assessments is essential for ensuring the ongoing improvement of stock assessments and the research programs providing information for them. An important part of the review of stock assessments will include improvement of trigger points (biological reference points) for each species. See section 9.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,7,8	From 2003	NSW Fisheries	-

- (c) Limit the size and dimensions of gear permitted to be used in the Ocean Hauling Fishery to the specifications provided in Appendix 1 and expand Appendix 1 to provide an explicit definition of all gear types used in Ocean Hauling Fishery.

Background: The Fisheries Management (General) Regulation 2002 provides the dimensions of the net types included in the Ocean Hauling Fishery, including variations in the dimensions based on area and time of year. Appendix 1 also provides the dimensions and descriptions of how each net is to be used within the fishery.

Most of the nets used in the fishery are well defined but there remain areas that could be made clearer. For example, it could be made explicit that only a purse seine net may have rings. Because the fishery environmental assessments must consider possible use of gear, as well as current common use, explicit definitions of the gear should make the assessment easier.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,6	By July 2003	NSW Fisheries	Regulatory

- (d) Continue to use size limits on selected species to prevent the exploitation of juvenile or sub-adult and/or mature fish as appropriate.

Background: Minimum legal lengths will continue to be applied to some species caught in the Ocean Hauling Fishery. For other species, it may be more appropriate to adjust the minimum size at capture by making selectivity of the fishing gear more appropriate or by having effective, harmless ways of sorting fish post-capture. This response is aimed in part at sustainable egg production and that objective may be achieved by other means. Minimum legal lengths can be applied to target species, conditional target species or any other species taken in the fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5	Current & ongoing	NSW Fisheries	Regulatory

- (e) Subject to approval by the Minister for Fisheries, provide for the development of species based resource plans and/or area based resource plans in consultation with the Ocean Hauling MAC, relevant stakeholders and the public as appropriate

Background: If there are found to be benefits in producing plans of management for particular species or areas relevant to the Ocean Hauling Fishery over and above the existing programs, the management strategy provides for their development subject to approval by the Minister for Fisheries.

An example of such plans may include the Estuary Management program for many of the State's estuary systems, which has been established by the NSW Government. Estuary Management Committees are formed and funded by Department of Land and Water Conservation and local council(s) with representation from State Government agencies (NSW Fisheries, National Parks and Wildlife Service, NSW Waterways, etc.) and local community interest groups

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4	As required	NSW Fisheries	-

Objective 2.2 To conserve fish stocks by managing levels of active effort in the fishery

Other important responses: 1.1d,e; 1.3,d; 2.1b,c; 2.3a; 2.5a,b,e,f,h-j; 4.1b; 4.5a; 6.1a,b; 8.2a,d

- (a) Improve management control of engine size on licensed fishing boats utilised in the beach-based fishery.

Background: In early 1997 an attempt to cap escalating effort in the beach hauling sector of the fishery was undertaken by implementing a closure limiting the engine unit of boats used in beach-based activities to less than 45 horsepower. It is accepted that the technical calculation of horsepower allowed some fishers to install engines that met the rules but that were more efficient than those they replaced. Such effort creep is predictable and far from unusual, and reinforces the need for strategies and tools to address effort creep in input control fisheries.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4	Ongoing	NSW Fisheries	Regulatory

- (b) Continue the prohibition on the use of unregistered fishing nets in the fishery, and the requirement that nets must meet the physical dimensions specified on registration certificates.

Background: Net registrations provide an additional control on fishing nets. Many registered nets meet specifications more restrictive than those in the Regulation and could not be upgraded to the maximum allowable dimensions without an appropriate net registration.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,6	Ongoing	NSW Fisheries	Regulatory

- (c) For each method in the Ocean Hauling Fishery use species-based closures as the preferred means of implementing short-term (up to several years) constraints on active fishing effort as required.

Background: Current entitlements to ocean hauling methods do not relate directly to fishing effort. Restraints on these entitlements (e.g. transfer rules) provide for long-term restructuring of fishing effort. The preferred approach for constraining fishing effort that meets possible needs in the short-term is to implement closures based on species, in preference to closures of methods or areas. Ocean hauling methods are sufficiently specific that removal of the entitlement to target a species for the duration of the closure should be an effective and efficient control on fishing for that species.

Whilst fishing closures are generally established on a seasonal, time, area, operator or gear specific basis, they can also be established to prohibit the taking of a particular species, either totally or conditionally. Closures are usually implemented for a period of five years or less, and remain in place for that duration unless revoked beforehand. Guidelines will need to be developed in consultation with the Ocean Hauling MAC, for implementing temporary closures. Section 4 of this management strategy provides further information about fishing closures and the process for their declaration.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5	As needed	NSW Fisheries	Regulatory

- (d) For all methods (other than purse seining) in the Ocean Hauling Fishery, use minimum shareholdings to determine access to the method.

Background: Shares are to be used to provide flexibility in the formation of hauling teams and to establish the link between fishing effort and team formation. For each method, in each region, a minimum shareholding will be required to make a team of two. This shareholding will be set separately for each region. The shareholding required to work larger teams will increase pro-rata from that number. For example, a team of four will require twice the shareholding as a team of two. The shares may be held by any combination of team members, including a single person. Providing the team has sufficient shares, persons in the team may comprise any licensed fishers (that is, not restricted to current endorsement holders). This can also provide for adjustment in the future to improve viability and resource sustainability if needed.

Shares could be used to determine a defined level of access rather than absolute access. For example, each share could provide a number of days of access to fishing with a method. That way, small shareholders could remain active in the fishery, albeit at a low level.

NSW Fisheries' status reports and stock assessments (as they become available) will be used to determine appropriate levels of access, which can then be adjusted using minimum shareholdings in the share management plan.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5,8	From December 2003	NSW Fisheries	-

- (e) Develop and implement a policy to manage the harvest of bait for the Commonwealth Tuna Fishery in NSW waters.

Background: More than 40 Commonwealth tuna fishers and/or boats currently have permits under Section 37 of the FM Act which allow the harvest for bait of selected species from NSW waters. The first step of the policy will be to limit ongoing permits to existing permit holders and cease issuing any new permits for tuna bait gathering. The new policy will provide for the following:

- i. inclusion of permit holders in an appropriate code of conduct as a permit condition*
- ii. inclusion of permit holders in any observer programs required for the class C (purse seine) sector*
- iii. development of an appropriate reporting system for permit holders to document all bait harvest*
- iv. a cap on the maximum number of permits that can be issued and a means of offering those permits by tender to all Commonwealth tuna fishers*
- v. a means of adjusting the number of permits to reflect both the sustainability and environmental needs of the fishery as well as the demand for access to the resource*
- vi. refine the definition of the purse seine gear or other controls to reflect the need to collect live bait only and discourage the collection of baits that could be purchased from NSW class C (purse seine) endorsement holders*
- vii. determination of the need and suitability of using lift nets in place of purse seine nets for bait gathering.*

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,7,8	i) by December 2003, ii) by December 2004, iii) by July 2003, iv) immediate, v) by December 2004, vi) by December 2005, vii) by December 2004.	NSW Fisheries	-

- (f) Develop and implement a policy (including reporting procedures) to manage the use of the lift net for collection of bait by NSW line fishers.

Background: In 1985 a concession was introduced to allow anyone to use lift nets for taking bait (pilchards, yellowtail and blue mackerel) for own use for tuna fishing. In 1995 the lift net was prescribed in the Regulations. The lift net is not part of any restricted fishery and must be included in a management strategy and assessed under EIS legislation to continue to be used. The Ocean Hauling Fishery is the primary harvester of these bait species and it is appropriate that this use of these resources is managed in association with ocean hauling.

In the three years from July 1997 (i.e. since fishers have been reporting bait for own use), 15 fishers have used lift nets to collect bait. A permit, with conditions similar to those for

Commonwealth fishers, will be used to manage access to this resource. The policy must be developed in consultation with the Ocean Trap and Line MAC, in particular, the policy regarding eligibility criteria for access to permits. The policy will also provide for:

- i. inclusion of permit holders in an appropriate code of conduct as a permit condition
- ii. inclusion of permit holders in any observer programs required for the class C (purse seine) sector
- iii. development of an appropriate reporting system for permit holders to document all bait harvest
- iv. a means of adjusting the number of permits to reflect both the sustainability and environmental needs of the fishery as well as the demand for access to the resource.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,7,8	i) by December 2003, ii) by December 2004, iii) by July 2003, iv) as required	NSW Fisheries	-

- (g) Develop a nomination policy for all sectors of the Ocean Hauling Fishery.

Background: Consultation with fishers in July 2001 suggested diverse opinions about the use of nominations in this fishery and the MAC needs to consider what rules should be applied. See section 4 (v) for more information on nominations.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5	By July 2004	NSW Fisheries	Regulatory

- (h) Continue the licensing arrangements described in this management strategy (see section 4 of this management strategy).

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,6	Current & ongoing	NSW Fisheries	Various

- (i) Develop an index of relative fishing power between boat-based and beach-based hauling (for methods that are common to both) and introduce appropriate management controls based on the differences in fishing power.

Background: The effort applied to take fish hauling from a boat as opposed to hauling from a beach is not comparable. Hauling from the beach involves a team of fishers (up to 10-15 people in some instances) where hauling from a boat may involve fewer individuals. The geographical access to fish is also different between the two types of hauling.

A definition of the relative fishing power between beach and boat-based methods can be used to correct for real differences in fishing power and adjust (any) minimum share levels that define access or differences in the characteristics of authorised gear.

This will require a clear definition of beach and boat-based hauling. The definition of beach-based hauling must not preclude the landing of the net to a boat in shallow water. This practice allows improved handling and release of unwanted catch and should be encouraged.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5	By July 2004	NSW Fisheries OH MAC	Regulatory

Objective 2.3 To prevent the activation of latent (unused) fishing effort by new entrants

Other important responses: 2.2e-h; 2.5h; 8.2a,d

- (a) Establish minimum entry requirements for new entrants at the fishing business level (i.e. taking into account entitlements held in other fisheries) to prevent increases in effort by small businesses.

Background: Similar to how the current Recognised Fishing Operation (RFO) policy and the transfer policy work, safeguards are needed to ensure that new entrants to the fishery replace active fishing effort before they can operate.

It is the Government's intention to encourage a full time professional fishing industry.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5	By December 2003	NSW Fisheries	Regulatory

- (b) Implement restrictions on the renewal of Ocean Hauling endorsements for the non-payment of annual Ocean Hauling endorsement fees.

Background: The Ocean Hauling MAC recommended in 2000 that any commercial fisher who has not renewed their ocean hauling endorsement for two years be advised that they will no longer be permitted to conduct ocean hauling activities. This arrangement will be continued in the share management plan.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5	By July 2004	NSW Fisheries	Policy & Regulatory

- (c) Continue with transfer guidelines that ensure the allocation of ocean hauling endorsements to new business owners is possible, only where that business previously held the relevant endorsement. It must also hold the minimum level of catch and participation required to replace historical participation rather than activate latent effort.

Background: Ocean hauling transfer rules were implemented in April 2000 to replace the restrictive transferability policy in place since the fishery was restricted in 1995.

The restrictive transfer policies are necessary to prevent endorsements which were granted under lower entry criteria being issued to new owners and utilised at much higher levels. The new transfer guidelines provide greater flexibility to the fishery, however, restrict access upon transfer to those businesses that demonstrate sufficient levels of historic participation to minimise any potential increase in effort.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5	Ongoing	NSW Fisheries	Policy

Objective 2.4 To minimise the impact of activities external to the Ocean Hauling Fishery on the resources harvested by the fishery and on fishery related habitats

Other important responses: 1.2a; 1.3d; 1.4a; 2.1d; 2.2h

- (a) NSW Fisheries and commercial fishers will contribute to the development of policies or legislation established by the NSW Government to ensure that fish stock and habitat issues (including beach habitat) are properly considered in other environmental planning regimes.

Background: NSW Fisheries and fisheries stakeholders are already represented on many natural resource management committees that operate across the State (e.g. Catchment Management Boards, Healthy Rivers Commission, Coastal Council of NSW, etc.).

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,6,7	Current & ongoing	NSW Fisheries OH fishers	-

- (b) The Ocean Hauling MAC will consider the impacts of activities external to the fishery on the resource and bring any detrimental impacts to the attention of NSW Fisheries and/or the relevant managing authority.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,5,6,7	Current & ongoing	OH MAC	-

- (c) NSW Fisheries will continue to review, provide relevant advice and where appropriate under the *Fisheries Management Act 1994*, impose conditions, in order to avoid or minimise impacts on fishery resources from coastal developments.

Background: Development applications submitted under the Environmental Planning and Assessment Act 1979 that have the potential to adversely impact on fish or fish habitat are often referred to NSW Fisheries for review and comment. Using its legislative powers under the FM Act, the Department has the ability to recommend the refusal of the development (if inconsistent with the FM Act or Policy and Guidelines for Aquatic Habitat Management and Fish Conservation 1999), recommend the approval of the development without changes, or in some circumstances, recommend the approval of the development with conditions to be attached to limit the potential impacts of the activity. Where issues do not fall within the legislative jurisdiction of the department, NSW Fisheries may still provide advice to the relevant determining authority to ensure that these issues are considered and appropriately addressed.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,7	Current & ongoing	NSW Fisheries	EP&A Act FM Act

Objective 2.5 To promote the recovery of overfished species

Other important responses: 1.1d; 2.1a–e; 2.2c,h;

Background: The process of developing a recovery program for an overfished species initially involves NSW Fisheries preparing a summary of the known factors that have led

to the determination of 'overfished' being made. In addition to the summary, a range of management options, including (but not limited to) those outlined in management response 2.5c will be identified and outlined in an information paper. Consultation will then formally commence with the relevant MACs and advisory bodies. The recovery program will be developed under the management strategy for the fishery which is the key harvester of the species concerned. This process may commence with a trigger point review (explained in sections 3 and 9). The process of determination of a species status is described in section 3. Additional information on recovery programs for overfished species is presented in section 3 of this management strategy.

It is important to note that an indicator for a species that has exceeded its trigger point does not automatically mean that species is overfished. Trigger points are set conservatively, (that is, they are likely to trigger "false alarms") in order to maximise the chance of detecting a genuine event of importance (see section 5(a)).

- (a) Where the fishery is a major harvester of an overfished species, develop and implement a recovery program for the species within a specified timeframe.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,6	Recovery program drafted for consultation within 6 months	NSW Fisheries OH MAC	To be determined

- (b) Where the fishery is a minor harvester of an overfished species, contribute to the development of a recovery program for the species and adopt any measures required by that program.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,6	As required	NSW Fisheries	To be determined

- (c) During the development of a recovery program for a species that has been determined as being recruitment overfished, implement precautionary actions including but not limited to any of the following:

- i. total harvest controls
- ii. reductions in effort associated with the harvest of the species
- iii. the implementation of fishing closures
- iv. bycatch management provisions
- v. mandatory gear changes.

Background: In the event that a species is determined to be recruitment overfished urgent action is needed to prevent the risk of a stock collapse. Growth overfishing on the other hand relates to maximising the yield from the stock and does not necessarily require immediate measures prior to the introduction of a recovery program.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,5,6	As required	NSW Fisheries	Various

- (d) Commence consultation with all harvester sectors of silver trevally over the development and implementation of a recovery program for that species, in particular consider the introduction of an appropriate size limit to address the growth overfishing problem.

Background: Silver trevally is growth overfished and landings of this increasingly valuable species have declined in NSW waters over the last 15 years. Silver trevally have been an important target species at some times in the Ocean Hauling Fishery, particularly for purse seine fishers. In the last ten years, trevally catches in this fishery have not been large, however, in the mid-1980s, purse seine catches of silver trevally were large and catches of those levels are likely to be a risk to the stock.

Contributing to Goals	Timeframe	Responsibility	Authority
2,6	Immediate	NSW Fisheries OH MAC	-

Objective 2.5.1 As the major harvester of sea garfish, to implement actions to commence the development of a recovery program

- (e) Discuss as soon as possible with the Estuary General MAC and industry to:

- i. remove the method of garfish bullringing from the Ocean Hauling Fishery
- ii. constrain garfish bullringing to estuaries only
- iii. remove the garfish hauling method from the Estuary General Fishery
- iv. commence discussion with the Estuary General MAC over more appropriate definitions of the waters where these methods can be applied.

Background: The Ocean Hauling MAC has made clear its view that, as a meshing method, garfish bullringing should not take place as part of the Ocean Hauling Fishery or in ocean waters. Similarly, the Estuary General MAC has expressed concern about the use of garfish hauling nets in that fishery. This change will effectively restrict targeting of sea garfish with the bullringing net because of the distribution of that species. The garfish hauling net and the garfish bullringing net have associated definitions of waters that may not be appropriate given the intent of the discussions mentioned above.

Further information on sea garfish is presented in section 3 of this management strategy, as well as in Appendix 3. A recovery program discussion paper will be presented to the relevant advisory groups, including the Ocean Hauling MAC, and this paper will include a precis of sea garfish to assist in the consultation over appropriate management of the species.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,6	By July 2004	NSW Fisheries OH MAC EG MAC	Regulatory

- (f) Continue the zoning scheme in the hauling sectors of the Ocean Hauling Fishery which includes all class A and B entitlement holders, both beach and boat-based sectors, which restricts fishers to operating in a single nominated zone.

Background: A zoning scheme was implemented in the beach hauling sector of the Ocean Hauling Fishery upon restricting access to the fishery in 1995. Zoning rules limit a

fisher's operation to one of seven regions along the NSW coastline. The zoning scheme was introduced to alleviate conflict among commercial fishers and between commercial fishers and other resource user groups. The major source of conflict was from fishers travelling to other areas. The current zoning structure has resulted in a significant reduction in conflict.

Some boat-based garfish haulers are currently permitted to operate in more than one ocean hauling region to catch sea garfish. In recent years, the inconsistency of zoning rules between beach and boat-based haulers has been a concern to many fishers and the Ocean Hauling MAC. Following reports of conflict and considerable discussion, the Ocean Hauling MAC has recommended that boat-based haulers with multi-region access be restricted to a single region.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,6	Ongoing	NSW Fisheries	Regulatory

- (g) Monitor the impact of the zoning of boat-based garfish hauling on the harvest of the sea garfish stock. Should the zoning of boat-based garfish hauling not have an immediate impact on landings of sea garfish (i.e. no reduction in landings by businesses that normally worked in multiple regions), implement a seasonal closure on sea garfish that will promote recovery of the species.

Background: The implementation of zoning for garfish operators is expected to reduce fishing effort on that stock. The Ocean Hauling MAC has suggested that the expected decrease in fishing effort should be about 40%. The Ocean Hauling MAC has indicated that if the zoning does not have the expected effect, a partial closure of the fishery would be the next step considered to protect sea garfish (until minimum shareholdings are available to control effort).

Contributing to Goals	Timeframe	Responsibility	Authority
2,8	From December 2002	NSW Fisheries	-

- (h) Identify the level of active effort for the garfish hauling net and implement appropriate minimum shareholdings immediately that will lead to the recovery of sea garfish.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5	By July 2004	NSW Fisheries	Regulatory

- (i) Remove the concession to use 25 mm mesh in the garfish hauling net.

Background: The permissible mesh size in a garfish hauling net is currently 28mm, however, a concession to use 25mm mesh has been in place since 1995. The concession has permitted a tolerance of up to 3mm. The allowable mesh size for a garfish hauling net is presently between 28 mm and 85 mm. The intention of this management response is to ensure that the minimum operating size of garfish hauling nets in the fishery is 28 mm to prevent the capture of smaller, less mature fish from the population.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,5	From December 2002	NSW Fisheries	Policy

- (j) Extend the November-February weekend closure on hauling to a year-round weekend closure for all garfish hauling.

Background: In August 2001, the Ocean Hauling MAC agreed that the closure on beach hauling could be extended to a year-round weekend closure for both beach and boat-based garfish hauling.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4	From December 2002	NSW Fisheries	Regulatory

Objective 2.5.2 To actively promote research programs that will improve stock assessment of sea garfish

- (k) Implement appropriate size mesh restrictions following the study which describes the retention and rate of meshing by size for sea garfish in 28 mm and larger mesh sizes in garfish hauling nets.

Background: Commercial landings of sea garfish in NSW have declined in recent years. Various management options, including mesh size regulations are being considered by the Ocean Hauling MAC to help arrest this decline. This research is planned to help examine the impacts of using 28 mm mesh in garfish hauling nets and to provide the background needed to support (or not) a decision to implement a mesh size in the garfish hauling net larger than the current 28 mm. This decision should be made in light of information on both selectivity and rate of meshing of garfish in any proposed mesh for a hauling net.

Contributing to Goals	Timeframe	Responsibility	Authority
2,7,8	By July 2003	NSW Fisheries	-

- (l) Continue existing programs on garfish assessment and monitoring and where appropriate make grant applications to expand those programs.

Background: Sea garfish are most likely to have been overfished and are being caught at levels which are generally the lowest in recent decades. There is an urgent need to improve biological knowledge of, and the stock assessment for, this species to ensure appropriate management settings. A two year study, funded by FRDC, University of Wollongong and NSW Fisheries, commenced in December 2001. The study will provide, among other things, age and growth estimates of sea garfish that will be of great value in assessing the stock status of that species. If this study does not provide sufficient data on which to base long term management decisions about the recovery of sea garfish upon, additional research or more precautionary management controls will be needed.

Contributing to Goals	Timeframe	Responsibility	Authority
2,7,8	Ongoing	NSW Fisheries	-

GOAL 3 To promote the conservation of threatened species, populations and ecological communities associated with the operation of the Ocean Hauling Fishery

Activities that impact on species, populations or ecological communities that are listed as being threatened must, under several pieces of state and federal legislation, be modified or phased out so as to mitigate those impacts. Protected animals must also receive a higher conservation status. This includes threatened mammals, birds, and reptiles, as well as fish species and could include habitats that are critical to the survival of such animals.

While there are no firm data, it is thought that the impact of the Ocean Hauling Fishery on threatened species, populations and ecological communities is small. Nevertheless, it is important to quantify and monitor any threatened species interactions, and have a management framework that is adaptive to change in the event that impacts are identified and found to be unacceptable.

Objective 3.1 To identify, eliminate and/or minimise any impact of fishing activities in the fishery on threatened species, populations and ecological communities (including mammals, birds, reptiles, amphibians, fish, invertebrates and vegetation), and where possible promote their recovery

Other important responses: 1.1a,c; 1.2b; 1.3c,d; 4.5b,c; 6.4a; 8.2a

- (a) Modify the catch and effort returns, in consultation with Ocean Hauling MAC, to collect and monitor information on sightings and captures of threatened or protected species.

Background: The guidelines for a “ecologically sustainable” fishery approved by the Commonwealth under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 include a requirement to collect information on interactions with endangered, threatened or protected species and threatened ecological communities. These species, populations and communities are listed in the FM Act, Threatened Species Conservation Act 1995 and the EPBC Act.

Contributing to Goals	Timeframe	Responsibility	Authority
3,6,7,8	By December 2002	NSW Fisheries All OH fishers	-

- (b) Implement, in consultation with the Ocean Hauling MAC, the provisions of any relevant threatened species recovery plans or threat abatement plans.

Background: An example of this may be to manage the harvest of baitfish in known ocean waters baitfish grounds to ensure an ongoing food supply for the little penguin colony at Manly or any other threatened species or populations identified as relying on these grounds for food supply.

Note: The recovery plans referred to in this response could include those being developed under the FM Act, the Threatened Species Conservation Act 1995 or other State or Commonwealth legislation. The response recognises that the statutory provisions of a threatened species recovery plan must be implemented and given precedence over the provisions of this management strategy.

Contributing to Goals	Timeframe	Responsibility	Authority
3,4	Current & ongoing	NSW Fisheries	FM Act

- (c) Continue the prohibition on taking protected fish and on fish protected from commercial fishing as set out in the FM Act and *Fisheries Management (General) Regulation 2002*.

Background: 'Protected fish' refers to species of fish that are protected from all forms of fishing. 'Fish protected from commercial fishing' as the name suggests, refers to species of fish that are protected from commercial fishing only. Protected fish includes some of those species also identified as endangered or vulnerable under Schedules 4 and 5, respectively, of the Fisheries Management Act 1994.

At the commencement of this management strategy, the marine and estuarine species of protected fish included Ballina angelfish, black rock cod, eastern blue devil fish, elegant wrasse, estuary cod, giant Queensland groper, grey nurse shark, Herbsts nurse shark, weedy seadragon, great white shark.

Fish protected from commercial fishing include (but are not exclusive to) marlin (black, blue and striped), groper (blue, brown and red), Australian bass and estuary perch.

The code of conduct to be developed for the fishery referred to in management response 4.5c(ii) could be used to prescribe best handling methods for releasing any protected fish, birds, reptiles or mammals that may be incidentally captured during fishing operations.

Contributing to Goals	Timeframe	Responsibility	Authority
3,4	Current & ongoing	NSW Fisheries	FM Act

- (d) Continue the prohibition of taking any species in commercial fishing operations protected under other jurisdictions' arrangements (this may include invertebrates, fish, reptiles, birds, mammals, plants, algae etc).

Background: Protected species are identified under the NSW Threatened Species Conservation Act 1995, the NSW National Parks and Wildlife Act 1974, the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999.

Contributing to Goals	Timeframe	Responsibility	Authority
3,4,6	As required	NSW Fisheries	Various

GOAL 4. To appropriately share the resource and carry out fishing in a manner that minimises social impacts

Most of the species taken by the Ocean Hauling Fishery are shared by fishers operating within the fishery (ie. among the different regions and endorsement types) and by other commercial and recreational fishing groups. The Ocean Hauling Fishery also operates on ocean beaches and in near shore ocean waters in close proximity to other users of the beaches and oceans and in areas of historical significance to Indigenous people. The zoning scheme introduced into the beach based sector of the fishery in 1995 solved many of the long standing social conflict issues that were prevalent in the fishery, as did the associated Ocean Hauling Code of Conduct. Despite these rules however, the social impact of the fishery continues to be an issue and is a matter that the management strategy aims to address.

Objective 4.1 To monitor and provide an appropriate allocation of the fisheries resource *between fishing sector groups*, acknowledging the need of seafood consumers to access fresh quality fish

Other important responses: 1.1d; 2.1a-d; 2.2a-f,h; 2.3a; 2.5a,b; 4.2a; 4.3a; 4.5a,c,d; 5.2d; 6.3c; 8.1b,c; 8.2a,c

- (a) Estimate, as far as practicable, the size of the non-commercial catch, and the relative impact of such harvesting on the resource, taking into account the results of the National Recreational and Indigenous Fishing Survey and information from charter fishing boat logbooks.

Background: Final results from this survey were not available at the time of drafting the management strategy, but are expected to be available by 2002. Illegal catch includes any 'black market' catch sold by licensed commercial fishers or unlicensed fishers. So that all impacts on a species can be considered, estimates of harvest rates from all sectors are vital for stock assessments. The accuracy of estimates of non-commercial catch will impact directly on the robustness of stock assessment information. Information obtained through the implementation of this management response will, where appropriate, be considered in relevant stock assessments.

In November 2000, a licensing scheme was introduced for all marine and estuarine charter boat operators. These operators are required to record catches taken on board licensed charter vessels as part of a mandatory logbook program. Estimates of harvest rates from all sectors will be used in stock assessments.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,8	By July 2004	NSW Fisheries	-

- (b) Continue the requirement that species landed in this fishery are not landed in contravention of any maximum daily catch or 'trip' limit that may apply to particular species.

Background: At the time of drafting the management strategy, a daily catch limit applied to two species taken by nets in the Ocean Hauling Fishery. A limit of 100 kg per day per hauling crew, 50 kg per meshing crew (or individual) and 50 kg for any other licensed

commercial fishing vessel containing a commercial fishing net applies for Australian salmon north of Barrenjoey Headland and tailor taken in all NSW waters.

Any relevant Information obtained through the implementation of this management response will, where appropriate, be considered in relevant stock assessments.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4	Current & ongoing	NSW Fisheries	Various

- (c) Review the quantum of beach available to hauling in the Ocean Hauling Fishery and develop performance measures for monitoring and modifying that amount over time.

Background: This management response provides for a periodic review of the percentage of overall beach area available to the fishery, and the modification of that amount from time to time.

Section 4 of this management strategy includes information about the regional liaison process commenced in 1995 to discuss shared access to beach areas on a local scale. One of the outcomes of the process was to identify traditional hauling areas where the fishery operated, and other areas where the fishery did not, or rarely operated. Management response 4.5a(iv) in this management strategy includes using the outcomes of this process to promote harmony between operators in the Ocean Hauling Fishery and other resource users. Section 4 of this management strategy and the background to management response 4.5a include further information on the implementation of outcomes of the regional liaison process.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4	By December 2004	NSW Fisheries	Various

Objective 4.2 To monitor and manage a fair and equitable sharing of the fisheries resource among commercial fisheries

Other important responses: 1.1d; 1.3a; 2.1a-d; 2.2a-f,h; 2.5a,b,e; 4.1b; 4.5a; 5.2d; 8.1b,c; 8.2a,c

- (a) Evaluate catch levels and monitor management structures in fisheries that are outside NSW jurisdiction but where catches in those fisheries impact on stocks shared with the Ocean Hauling Fishery.

Background: The Ocean Hauling Fishery shares many resources with other fisheries across jurisdictional boundaries. Examples include the Commonwealth's Small Pelagic Fishery (SPF) and South East Non-trawl Fishery (SENTF), the sea mullet fishery in Queensland and the fishery for Australian salmon in Victoria.

Section 3 of this management strategy includes information about a more coordinated approach (including meetings) to collaboration between NSW Fisheries and management agencies in Queensland, Victoria and the Commonwealth for shared species. Such an approach will assist in implementing this management response.

This management strategy must provide for regular updates on catch and changes in management or catch composition in these other fisheries. Where possible, it is important to have consistent or complimentary management arrangements for shared stocks, between jurisdictions.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,8	Annually	NSW Fisheries	-

- (b) Monitor the catch of the target ocean hauling species that are also taken in other NSW fisheries (i.e. Estuary General Fishery, Ocean Trap and Line Fishery).

Background: This management response may also provide information that will be considered in stock assessments as well as detecting changes in catch trends between sectors.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,8	Annually	NSW Fisheries	-

Objective 4.3 To monitor and manage a fair and equitable sharing of the fisheries resource within the Ocean Hauling Fishery

Other important responses: 1.1d; 1.3a; 2.1a-d; 2.2a-h; 2.3b; 2.5a,b,e,f,h; 5.2d; 8.1a-c; 8.2a,c,d

- (a) Include in the shareholding scheme a maximum shareholding that sets a maximum level of effective control of fishing access within each region or method by any single individual or entity.

Background: Implementation of share trading schemes can lead to reducing the control of access rights to a small number of businesses, if not limited.

The Ocean Hauling MAC have initiated discussions on this issue highlighting concern that some smaller fishing businesses are being purchased by entities who may own several fishing businesses. These companies then nominate fishers to work the businesses.

Contributing to Goals	Timeframe	Responsibility	Authority
4,5	By July 2004	NSW Fisheries	-

Objective 4.4 To minimise any negative impacts of the Ocean Hauling Fishery on Aboriginal or other cultural heritage

Other important responses: 4.1a; 6.4a

- (a) Participate in the development and subsequent reviews of the Indigenous fisheries strategies.

Background: Consistent with objective 6.4, this management strategy is adaptive to a range of other concurrent programs, such as the Indigenous Fisheries Strategy.

Contributing to Goals	Timeframe	Responsibility	Authority
4,6	As required	NSW Fisheries	To be determined

- (b) Respond, wherever practicable, to new information about areas or objects of cultural significance in order to minimise the risk from fishing or fishing activities.

Background: The Ocean Hauling Fishery must respond appropriately to new information about items or locations of cultural significance (e.g. a recently uncovered shipwreck). The NSW National Parks and Wildlife Service (NPWS) is responsible for management of cultural heritage within NPWS estate and for the protection of Aboriginal objects on all lands.

Contributing to Goals	Timeframe	Responsibility	Authority
4	Immediate	NSW Fisheries OH Fishers	-

Objective 4.5 To promote harmony between the commercial fishery and other resource users, including recreational fishers, Indigenous fishers and local communities, through fair and equitable sharing of the fisheries resource

Other important responses: 1.1a-e; 1.2b,c; 1.3d; 2.1c,d; 2.2a,e-h; 2.5d,e,j; 3.1c,d; 4.1a,b; 4.3a, 4.4a; 6.1b; 6.3b; 6.4a; 7.1a-d; 7.2a; 8.2a,b

(a) [Continue to] use fishing closures to control the area and time fished to:

- i. protect key fish habitat, such as total beach closures
- ii. reduce bycatch in places or at times when the amount of bycatch is unacceptable
- iii. avoid direct interactions with marine and terrestrial threatened species, populations or ecological communities
- iv. equitably share the resource between ocean hauling fishers and other stakeholders (including through the regional liaison process)
- v. minimise impact on nesting and/or feeding areas of migratory birds
- vi. minimise impact on sensitive ocean beach habitat.

Background: Fishing closures prohibit fishing over an area either absolutely or conditionally. In this management strategy all uses of the term “fishing closure” has a broad meaning encompassing any legally enforceable prohibition or restriction on fishing activity. This includes: fishing closures made under Division 1, Part 2 of the FM Act; aquatic reserve notifications made under Subdivision 3, Division 2, Part 7 of the FM Act; regulations under section 20 of the FM Act (as amended by the Fisheries Management Amendment Act 2001); regulations under section 220ZE of the FM Act; and regulations under section 205B of the FM Act.

Numerous fishing closures already exist that impact on the Ocean Hauling Fishery for a range of reasons. Each closure generally has benefits to numerous aspects of the resource and the fishery. Existing closures cover about 6% of the beach otherwise available to the ocean hauling beach sector.

Fishing closures can be gear specific so that only the relevant gear types are affected by such a closure. Closures are periodically reviewed and modified to take account of changing fishing patterns and/or environmental conditions.

The regional liaison process was established in 1995 for five of the seven ocean hauling regions to address many of the issues related with the Ocean Hauling Fishery (particularly the beach-based sector) at a local level. The consultative process aimed to ensure social sustainability for the fishery. Committees contained representatives from

recreational fisheries, local councils, NPWS and a variety of community groups. Traditional hauling grounds and ocean hauling beach closures, specified beach access points, agreed local target species and local amendments to the ocean hauling code of conduct were proposed by each committee under this process.

The Ocean Hauling MAC strongly supported the outcomes of the regional liaison process and seeks to have them reviewed and where possible, implemented as part of this management strategy. This dramatically increases the area of beach in NSW that is temporarily or permanently closed to the Ocean Hauling Fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,6	Current & ongoing regional liaison process by July 2004	NSW Fisheries	Regulatory

(b) Review in consultation with the Ocean Hauling MAC on an annual basis the established code of conduct, enforceable by conditions on licence, for the beach-based sector of the fishery, which outlines rules for:

- i. operating on beaches that minimise environmental impacts in those areas
- ii. operating in the vicinity of areas used by recreational fishers
- iii. the use of gear and the behaviour of commercial fishers
- iv. the appropriate handling methods for incidental catches of marine birds or mammals
- v. encouraging the use of effective value-adding and icing techniques to maximise the market price of product taken
- vi. locally negotiated access and beach conduct rules or other locally negotiated rules as appropriate.

Background: A code of conduct is in place for the beach sector of the Ocean Hauling Fishery which sets standards for the manner in which fishers operate. A code of conduct which has the support of surrounding communities goes a long way to improving the relations between the commercial fishing industry and other stakeholders. This code is under regular review by NSW Fisheries and the Ocean Hauling MAC and input from other natural resource agencies (e.g. National Parks and Wildlife Service) will be sought when developing relevant parts of the code. The code of conduct should provide for regional codes and will be enforceable through the share management plan for the Ocean Hauling Fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
1,3,4,5,6,7	Annual	NSW Fisheries OH MAC	Regulatory

(c) Develop a code of conduct in consultation with the Ocean Hauling MAC, to be enforceable by conditions on licence, for the boat-based sector of the fishery and with respect to:

- i. operating in the vicinity of areas used by recreational fishers or grounds subject to intense recreational bait gathering

- ii. the use of best practice handling and release methods for incidental catches of protected fish, birds, reptiles, mammals, plants and algae, including aborting a shot if dolphins become encircled
- iii. the use of gear and the behaviour of commercial fishers
- iv. encouraging the use of effective value-adding and icing techniques to maximise the market price of product taken.

Background: Purse seine fishing and other boat-based fishing methods are not dealt with specifically in the existing code. A new code for boat-based fishers would need to include any issues that might bear specifically on the Commonwealth tuna fishers who hold permits under section 37 of the FM Act to gather bait using purse seines. For example, the code of conduct might consider voluntary closures on weekend fishing for bait at popular recreational bait grounds. The code will also consider rules that provide for best practice on releasing incidental catches of marine birds or mammals.

The code of conduct for the boat based sector of the Ocean Hauling Fishery will be developed and periodically reviewed (and amended where necessary) by NSW Fisheries in consultation with the Ocean Hauling MAC. Input from other natural resource agencies (e.g. National Parks and Wildlife Service) will be sought when developing relevant parts of the code. The code of conduct should provide for regional codes and will be enforceable through the share management plan for the Ocean Hauling Fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
1,3,4,5,6,7	By December 2003	NSW Fisheries OH MAC	Regulatory

- (d) Consult with the community on proposals for recognised fishing grounds, subject to and in accordance with the guidelines approved by the Minister for Fisheries, and implement the outcomes as appropriate.

Background: Recognised fishing grounds determine the rights of priority for certain methods between commercial fishers and other beach users in specified areas. They do not prevent local Councils from approving applications for development in or over those areas, but they can be useful in highlighting areas of importance to commercial fishing. The regional liaison process that was established in 1995 has taken initial steps in identifying traditional hauling grounds in each ocean hauling region. Further information on recognised fishing grounds is provided in section 4 of this management strategy.

Contributing to Goals	Timeframe	Responsibility	Authority
4,5,6	Ongoing	NSW Fisheries OH MAC	Regulatory

GOAL 5. To promote a viable commercial fishery (consistent with ecological sustainability)

In terms of gross value of production, the Ocean Hauling Fishery is worth approximately \$5 million annually (not including revenue received from the export market which generally yields higher prices). With the progressive phase in of full cost recovery of attributable costs between year 2005 and 2008, ocean hauling fishers need to be in a position to fund a greater proportion of the management costs. Viable fishing businesses have a greater incentive to support long term management decisions that are needed for sustainability now and into the future.

Objective 5.1 To optimise the biological yield of fish taken within the fishery where appropriate to maximise economic return

Other important responses: 2.1a–d; 2.2c; 2.5a–c,i; 4.1a; 8.1b,c

- (a) Provide for the continued taking of target species that become subject to minimum legal length regulations, subject to appropriate management of bycatch issues created by the length restriction.

Background: Some ocean hauling methods are prohibited from taking any fish that has a prohibited size classification (usually a minimum legal length). Species currently targeted by these methods may have legal minimum length restrictions imposed at some future date in order to improve yield or for other reasons. The intent of a size limit would not be to stop access to the species, but to force all catching sectors to sustainably harvest subject to a length limit.

The Ocean Hauling Fishery will need to demonstrate that any bycatch issues arising from a new size limit can be managed sustainably.

Contributing to Goals	Timeframe	Responsibility	Authority
5	Ongoing	NSW Fisheries OH MAC	Regulatory

Objective 5.2 To promote the long term economic viability of ocean hauling

Other important responses: 2.2d,e–h; 2.3a,b; 2.5a,h,i; 4.1a; 4.3a; 4.5b,c; 5.3a; 6.3c

- (a) Determine if there is a means by which purse seine fishers could keep small quantities of their catch alive in holding pens for short periods, while meeting the legislative and policy requirements of NSW Fisheries and other stakeholder groups or agencies.

Background: Under the Fisheries Management Act 1994 fish penning is currently considered an aquaculture activity, which requires an aquaculture permit. Fish pens have advantages for commercial fishers in that product can be kept alive and filtered into the markets over time, achieving improved prices.

However, there are potential risks of pens that need to be managed, including the stimulation of disease due to the confinement of large numbers of fish in small cages, increased nutrient loading into the surrounding environment if the fish are fed and visual pollution issues with local communities and other Government authorities. The fishery will need to adopt best practice models for cage design and site selection for this to be viable.

Contributing to Goals	Timeframe	Responsibility	Authority
5	By July 2006	NSW Fisheries	Regulatory

- (b) NSW Fisheries will develop, in consultation with the Ocean Hauling MAC, a performance measure for economic viability at both individual fishing business and fishery wide levels.

Background: The intention of this management response is to provide for the development of performance measures to monitor both the economic performance of the fishery at the individual fishing business level, and also the economic performance of the fishery as a whole. Monitoring only one of these measures in isolation of the other may not always portray an accurate representation of economic viability, and therefore may not provide a robust indicator of whether additional programs or adjustment are warranted. These indicators will be consistent with objective 8.3, which aims to increase knowledge of the economic and social aspects of the Ocean Hauling Fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
5,7	By July 2005	NSW Fisheries OH MAC	-

- (c) NSW Fisheries will develop and implement, in consultation with the Advisory Council on Commercial Fishing, a cost recovery framework.

Background: On 2 November 2000, the Government announced that over the succeeding five years NSW Fisheries would develop and implement a fair and transparent cost recovery framework for category 2 share management fisheries. During this period, the total amount of money collected by NSW Fisheries, for its existing management services, will not increase without the support of the relevant management advisory committee. A cost recovery framework needs to be developed in order that fishers pay according to their level of access in the fishery.

Full cost recovery contributes to/is an indicator of viable commercial fisheries operating in a sustainable way. Operators need to be in a position, by 2008, to afford to pay for the attributable costs of management from their fishing revenue. Viable fishing businesses, without Government subsidy, have a greater incentive to support long term management decisions that are needed now and into the future. From 2005, recovery of the costs that have been identified as attributable to industry will be progressively introduced over a further three year period.

Contributing to Goals	Timeframe	Responsibility	Authority
5,6	By November 2005	NSW Fisheries ACCF	Ministerial determination

- (d) NSW Fisheries will develop, in consultation with the Ocean Hauling MAC, a system to provide for appropriate new additions to the lists of target species for each of the ocean

hauling methods. The system should also provide for assessment of proposed changes to the application of fishing methods (or new methods).

Background: With the commencement of this management strategy, each of the ocean hauling methods will have a designated list of species that may be targeted. The system needs to provide an appropriate assessment system to allow species to be added to the target list or new methods to be activated, taking into account the impact on:

- i. sustainability
- ii. habitat
- iii. other resource users.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,5,6	By December 2003	NSW Fisheries OH MAC	-

Objective 5.3 To provide secure fishing entitlements for ocean hauling fishers

Other important responses: 2.1b; 2.2d,h; 2.5b; 4.5d; 5.2d; 6.3c; 8.1b,c

- (a) Implement the share management provisions of the *Fisheries Management Act 1994*.

Background: The category 2 share management provisions allow for the allocation of shares with a 15 year term to eligible persons, and with a statutory right to compensation if the Government cancels the shares during their term. A category 2 share management fishery may be converted to a category 1 share management fishery in accordance with the Fisheries Management Act 1994.

A share management plan must be created and that plan must be fully reviewed within 10 years after commencement.

Contributing to Goals	Timeframe	Responsibility	Authority
5,6	By December 2003	NSW Fisheries	FM Act

Objective 5.4 To appropriately manage food safety risks in the harvesting of fish in the fishery

Other important responses: 2.4b; 4.5b,c; 6.1d; 6.4a

- (a) Co-operate with SafeFood Production NSW in the development and implementation of food safety programs relevant to the fishery.

Background: SafeFood Production NSW is currently in the process of developing food safety plans for harvest and post-harvest seafood industry, and the plans may impose statutory requirements on fishers to comply with the approved standards. Supporting food safety programs is a responsible way of promoting consumer confidence in fish products harvested by the fishery and protecting viability of the industry.

Contributing to Goals	Timeframe	Responsibility	Authority
5,6	Current & ongoing	OH Fishers	FP Act

- (b) Continue the prohibition on the processing or mutilation of fish taken in the fishery on or adjacent to water.

Contributing to Goals	Timeframe	Responsibility	Authority
2,5,6	Current & ongoing	NSW Fisheries	Regulatory

GOAL 6. To ensure cost-effective and efficient ocean hauling management and compliance programs

Effective management and compliance programs are important to the successful implementation of the fishery management strategy. As full cost recovery is phased in to the Ocean Hauling Fishery in the coming years, it is important that programs are conducted in an efficient and cost-effective manner. This goal can be achieved through the cooperation of ocean hauling fishers, ongoing communication and consultation between NSW Fisheries and industry through the Ocean Hauling MAC, and promoting complementary management programs, with adjacent jurisdictions, and in particular, with the Commonwealth.

Objective 6.1 To maximise compliance with the Ocean Hauling Management Strategy

Other important responses: 2.1c; 2.2b,f,h; 2.5e,f; 4.5a,b,d; 5.3a; 5.4b; 6.2a; 6.3a; 7.1a,b,c,d; 8.2b,c,d

- (a) Develop, implement and monitor, in consultation with the Ocean Hauling MAC, fishery compliance operational plans and encourage voluntary compliance through educational programs.

Background: To assist in delivering regionally focussed compliance and advisory services, there are currently 19 Fisheries Offices along the NSW coast. Each of these offices provides services for a range of programs, one of which is the Ocean Hauling Fishery. The level and focus of services targeted towards the Ocean Hauling Fishery varies in each district, and is determined by the nature of the activities in that area. Fisheries officers in each office operate under a district compliance plan to ensure appropriate compliance coverage across all programs. District compliance plans are subject to fortnightly review to consider any changed circumstances and are also subject to an annual review.

Each district compliance plan is developed to be consistent with the compliance strategic plan for NSW Fisheries. This plan is an overarching framework that identifies priorities and objectives for compliance throughout the State. The Ocean Hauling MAC will be consulted over priorities relevant to the fishery prior to each review of the compliance strategic plan. The compliance strategic plan is subject to a review every three years

Contributing to Goals	Timeframe	Responsibility	Authority
2,6	By July 2004	NSW Fisheries OH MAC	Policy

- (b) Implement an endorsement suspension scheme and share forfeiture scheme based on a demerit point scale for serious offences and habitual offenders.

Note: "serious offences" need to be defined and could include offences such as interfering with fishing gear, offences carrying serious consequences, etc. Refer to section 5 for further details.

Contributing to Goals	Timeframe	Responsibility	Authority
2,4,6	By December 2003	NSW Fisheries	Regulatory Policy

- (c) Publish, where appropriate, successful prosecution results for nominated offences in relevant publications and media to discourage illegal activity.

Contributing to Goals	Timeframe	Responsibility	Authority
6,7	Ongoing from 2003	NSW Fisheries	-

- (d) Continue the requirement that fish taken in the fishery are marketed through a registered fish receiver (RFR) or a restricted registered fish receiver (RRFR).

Contributing to Goals	Timeframe	Responsibility	Authority
5,6,8	Current & ongoing	NSW Fisheries	Regulatory

Objective 6.2 To encourage cooperation between fishers and compliance officers in detecting offences

Other important responses: 2.2h; 5.3a; 6.1a; 6.3a; 7.1a-d

- (a) Continue the requirement that fishers comply with directives given by Fisheries Officers, including to allow officers to board fishing boats to inspect catch, and to produce "Authority to fish" when requested.

Contributing to Goals	Timeframe	Responsibility	Authority
6	Current & ongoing	NSW Fisheries	FM Act

Objective 6.3 To provide effective and efficient communication and consultation mechanisms in relation to the Ocean Hauling Fishery

Other important responses: 1.3b,d; 2.4a,b; 2.5a,b,d,e; 4.4a; 4.5a,b; 5.2c,d; 5.3a; 6.1a,c; 7.1a-d; 7.2a; 8.1d; 8.2b,c

- (a) Continue to recognise the Ocean Hauling MAC as the primary consultative body for issues affecting the fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
6	Current & ongoing	NSW Fisheries	Policy

- (b) Continue to use the services of a chairperson in the Ocean Hauling MAC who is not engaged in the administration of the *Fisheries Management Act 1994* nor engaged in commercial fishing.

Contributing to Goals	Timeframe	Responsibility	Authority
4,6	Current & ongoing	NSW Fisheries	FM Act

- (c) Monitor, in consultation with the Ocean Hauling MAC, access restrictions from other jurisdictions (parks, councils).

Background: Fishers have expressed concern over their access to beaches that are not managed by NSW Fisheries. The Ocean Hauling MAC has undertaken discussions over the access to intertidal areas by management authorities such as the NPWS. Currently, ocean hauling fishers apply for permits for access through National Parks, and NPWS have gazetted plans of management to control activities to the mean low water mark. NSW Fisheries is generally consulted by NPWS in areas where jurisdictional overlaps occur.

Consultation with local councils over beach access is also proposed. This strategy must take account of the impact on the fishery of all effective closures, whether or not they are part of this management strategy.

Contributing to Goals	Timeframe	Responsibility	Authority
4,5,6	Annual review	NSW Fisheries	-

Objective 6.4 To implement this management strategy in a manner consistent with related Commonwealth and State endorsed programs aimed at protecting aquatic environments, and achieving the objects of the Act and the principles of ecologically sustainable development

Other important responses: 1.2a; 1.3c,d; 1.4a; 2.2h; 2.5a-c; 3.1a,b,d; 4.4a

- (a) Manage the Ocean Hauling Fishery consistently with other jurisdictional or natural resource management requirements, such as the marine parks program, aquatic biodiversity strategy, threatened species program and others.

Background: This management strategy will be operating alongside other programs relating to the management of marine resources, and must be consistent with those programs. The management strategy must be adaptive and able to be modified if inconsistencies between the programs become apparent.

Contributing to Goals	Timeframe	Responsibility	Authority
1,3,4,5,6	Current & ongoing	NSW Fisheries	Policy

- (b) Provide for the issue of permits under section 37 of the *Fisheries Management Act 1994* authorising modified fishing practices to assist research programs or for purposes consistent with the vision and goals of this management strategy.

Background: Permits are required to use gear in a manner that is different to that specified in Appendix 1. Approval to trial new approaches to fishing gear design is commonly given to industry members participating in research. This provides a formal mechanism to operate in a manner other than as set out in the Fisheries Management Act 1994 or regulation.

Contributing to Goals	Timeframe	Responsibility	Authority
6,8	Current & ongoing	NSW Fisheries	FM Act

GOAL 7. To improve public understanding of the Ocean Hauling Fishery and of the resources upon which the fishery relies

Information needed by those who influence fisheries management and policy, as well as by those who have an interest in fishing is generally an issue identified as needing improvement throughout the world. One of the most important areas of need is providing general information about the fishery to relevant stakeholder groups and to the community generally.

The operating environment, target species, harvests and bycatch of the Ocean Hauling Fishery are poorly understood in the community. Ocean hauling fishers have acknowledged a need to promote understanding of their operations in order to minimise misunderstandings in the community about bycatch and habitat interactions in their fishery.

Objective 7.1 To improve the community understanding and public perception of commercial ocean hauling fishing

Other important responses: 1.1a; 1.2a; 1.3d; 2.1a,b; 2.2e,f; 2.4a-c; 2.5k,l; 3.1a; 4.5b,c; 5.2b; 6.1c; 7.2a; 8.1a-d; 8.2a,c-e

(a) Develop and implement an education strategy for fishers and NSW Fisheries contact officers.

Background: Fishers and NSW Fisheries contact officers should have current and complete information about the range of management controls and policies that control the Ocean Hauling Fishery. Those groups also need to understand the long-term objectives for the fishery and how industry and NSW Fisheries are working toward those objectives. The end users of this education strategy must be involved in its development in order to ensure it meets their needs.

Note: The education strategy could be expanded to comprise all education aspects of management of this fishery. Such a strategy would include the details for things like how catch statistics are compiled and published, how management advisory committee minutes are to be made public, and how results from research programs on the fishery are to be extended to industry and the community.

Contributing to Goals	Timeframe	Responsibility	Authority
4,6,7	By July 2003	NSW Fisheries	-

(b) Make the Fishery Management Strategy, Environmental Impact Statement and other relevant documentation widely available to the public by:

- i. placing them on the NSW Fisheries website
- ii. providing copies at Fisheries Offices throughout the State
- iii. targeted mail outs to key stakeholders.

Contributing to Goals	Timeframe	Responsibility	Authority
4,6,7	Ongoing	NSW Fisheries	-

- (c) Produce or contribute to the production of brochures, newsletters, signs and undertake targeted advisory and educational programs, as required.

Background: The diverse nature of stakeholders in the Ocean Hauling Fishery means careful consideration must be given to the appropriate forms of communication to make certain all stakeholders receive appropriate information.

Contributing to Goals	Timeframe	Responsibility	Authority
4,6,7	Ongoing	NSW Fisheries	-

- (d) Respond to inquiries by industry or the public with respect to the management strategy or the fishery generally.

Contributing to Goals	Timeframe	Responsibility	Authority
4,6,7,8	Current & ongoing	NSW Fisheries	-

Objective 7.2 To promote community awareness of the importance of fish habitat to fish stocks

Other important responses: 1.2a; 2.1b; 2.4a-c; 7.1b; 8.1b,c

- (a) Publish educational information concerning the protection of fish habitat (including the benefits of aquatic reserves) on the NSW Fisheries website and in other relevant publications and media.

Contributing to Goals	Timeframe	Responsibility	Authority
4,6,7	Current & ongoing	NSW Fisheries	-

GOAL 8. To improve knowledge of the Ocean Hauling Fishery and the resources upon which the fishery relies

The harvest in the beach fishery by teams of individuals is often at odds with the structure of the catch reporting system, which is based on individual reports. This may have led to anomalies in converting the catch of a team to the catches of the individuals in that team. There is also a need to ensure the accuracy of the species identified on catch returns and the consistency of the application of common species names used in the fishery. There is also a general lack of knowledge regarding the biology and status of many of the key species that needs to be rectified over the coming years.

Objective 8.1 To promote appropriate scientific research and monitoring to gain knowledge of target species and bycatch

Other important responses: 1.1a; 1.3b,c; 2.1a,b,e; 2.2e,f; 2.5g,k,l; 3.1a; 4.1a; 4.2a,b; 6.4b; 7.1d; 8.2a-e

- (a) Monitor all species and quantity of catches taken by each net type (and where appropriate, within each region) used in the Ocean Hauling Fishery.

Background: The structure of the current catch return, although in need of revision, provides for ocean hauling catches to be recorded under each net authority available in the Ocean Hauling Fishery. Catches recorded by net type provide understanding about changes in targeting practices or other changes in the relationship between methods and gear. Management response 8.1g includes the development of trigger points to detect concerning trends for all species taken in the Ocean Hauling Fishery. This system of trigger points is due to be implemented after the first annual performance review of the fishery. This management strategy provides for the application of those trigger points on a method of harvest basis for individual species. This may be done to increase the level of monitoring of a species that demonstrates concerning catch trends, or if the monitoring is deemed appropriate by the Director, NSW Fisheries for any other reason.

Contributing to Goals	Timeframe	Responsibility	Authority
4,7,8	Annual review	NSW Fisheries	-

- (b) Continue with annual stock assessment and monitoring of sea mullet in NSW.

Background: A three year project completed in 1997 provided the first detailed study of the biology and fishery for sea mullet since the 1950s. Annual monitoring age/size composition of the ocean and estuarine commercial catches have continued since 1997. This is an ongoing program that is developing a detailed assessment of the status of the sea mullet resource in order to provide advice to in relation to the management of the fishery on a sustainable basis.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,7,8	Current & ongoing	NSW Fisheries	-

- (c) Continue with annual stock assessment and monitoring of yellowfin bream in NSW.

Background: A continual program is in place that assesses the size composition, effort trends and derives the age composition of ocean and estuarine catches of yellowfin bream in NSW. The information contributes to developing a conceptual model and a preliminary simulation model of the bream stock in NSW.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,5,7,8	Current & ongoing	NSW Fisheries	-

- (d) Determine, in consultation with stakeholder groups identified by NSW Fisheries, the priorities for research for the fishery, taking into account the research needs identified in this management strategy, in the EIS or arising out of new research results.

Background: NSW Fisheries has commenced consultation with a broad range of stakeholder groups over the development of research priorities relating to the State's fisheries resources, including the Ocean Hauling Fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
6,7,8	Ongoing	NSW Fisheries	-

- (e) Allocate research resources and where appropriate make grant applications to support research relevant to the fishery in accordance with the priorities identified from the process described in management response 8.1d.

Background: Research into the Ocean Hauling Fishery is currently funded through a combination of NSW Fisheries core expenditure and external grants from State and Commonwealth research and development programs. Shareholders will contribute to the costs of research programs in accordance with the cost recovery policy outlined in management response 5.2c.

Contributing to Goals	Timeframe	Responsibility	Authority
8	Ongoing	NSW Fisheries	-

- (f) Promote research that contributes to more robust and reliable fish stock assessments and continue to respond to the Ocean Hauling MAC in prioritising research programs.

Background: A clear expression of the relative priorities for stock assessment work is essential to ensure the most effective use of resources used for stock assessment. Making priorities for stock assessment and other research publicly available helps other institutions (e.g. universities) in determining directions for future research that may benefit the fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
8	Current & ongoing	NSW Fisheries	-

- (g) Develop an objective system for defining and setting trigger points to detect concerning trends in landings of species taken in the Ocean Hauling Fishery.

Background: Unlike annual trigger points which are designed to detect dramatic changes over short periods, these trigger points will be designed to detect patterns in

landings that are of sufficient concern to require a review (e.g. a downward or upward trend over several years). The assistance of a statistical expert will be sought to develop the system for setting this type of trigger point. The system will be tested during the first nine months following the commencement of the management strategy and applied to all species landed in the fishery at the first annual review. (See section 9 for a more detailed discussion on setting trigger points for monitoring changes in commercial landings). If the application of these trigger points for all species shows concerning trends for any conditional target species, the management strategy has provision to allow for increased monitoring or management controls for those species.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,8	Annually from 2003	NSW Fisheries	-

Objective 8.2 To improve the quality of the catch and effort information collected from endorsement holders

Other important responses: 1.1a; 1.3c; 2.1a,b; 2.2d-f; 3.1a; 6.1d; 8.1a-c

- (a) Continue the requirement that every commercial fisher must make a record of all fish he or she has taken during each month, including the method/s used and send a copy to the Director, NSW Fisheries within 28 days following the end of the month.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,7,8	Current & ongoing	NSW Fisheries	Regulatory

- (b) Periodically review, in consultation with the Ocean Hauling MAC, the mandatory catch and effort return forms submitted by ocean hauling fishers and implement changes if:
- i. the data collected is perceived to be of poor quality or insufficient for the purpose of conducting an environmental or stock assessment, and/or
 - ii. the forms are found to be exceedingly complex for fishers to complete, ensuring an emphasis on the quality rather than quantity of information collected.

Background: NSW commercial fishers are required to report their landings to the Department. The records are a vital part of fisheries assessments and understanding the activities of fishers.

A working group of commercial fishers and NSW Fisheries staff is reviewing catch and effort returns used by fishers. The working group will help to the current to improve the quality of data collected. Any proposed changes would be discussed with the Ocean Hauling MAC.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,6,7,8	Biannually from July 2004	NSW Fisheries	-

- (c) Determine accuracy of current recording of species identification in catch records and provide advice to industry to make needed changes (may need to wait for results from observer study).

Background: Correct species identification is critical to many areas of the performance of this management strategy. Most species in the fishery are clearly and easily identified and accurately reported. However, it is not unequivocally clear that terms like pilchard, sprat, anchovy and whitebait mean exactly the same thing to all fishers and that the common names relate in each case to a single species. The observer study will be of great value in implementing this management response. Observers will provide first-hand information on what common names are used to identify what species and any patterns in the use of terms. This information will be used to make certain the industry advice and education is appropriately targeted. The implementation of this management response will provide benchmark information to assist in implementing management response 8.2f, which aims to increase the accuracy of reported information by using individual species names wherever possible.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,6,7,8	July 2004	NSW Fisheries	-

- (d) Ensure that catch reporting in the Ocean Hauling Fishery accurately reflects the landings and, the composition and effort of the crew that made those landings. **In particular, use team-based, daily records for beach hauling during the mullet travelling season (i.e March to July).**

Background: Current practice in catch recording leaves open the possibility that some catch is recorded more than once. Crew composition may change within the monthly reporting period, making the bookkeeping associated with crew within hauling teams awkward on a monthly form. There will be sufficient accuracy and information gained to warrant a change in the recording for some hauling activities, particularly during the mullet travelling season. Other changes should include reporting by region and beach instead of reporting by the latitude zones. For methods that may be beach or boat-based, the catch return should reflect which was used.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,6,7,8	Ongoing	NSW Fisheries	-

- (e) Provide means by which ocean hauling teams can report fish observed but not caught.

Background: Beach-based hauling teams routinely place an observer (spotter) at an elevated location in order to inform the team of the size and composition of schools of fish that are approaching the area where the team is waiting. Many of these schools are not the species sought or are too small to be worthwhile. Alternately, spotters may have indicated that a larger aggregation of fish is approaching and the team may want to wait for that. The relationship between what is spotted and what is captured may be a useful index of the rate at which fish escape the fishery, of species that could be affected by the fishery, and provide information for use in stock assessments.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,7,8	July 2003	NSW Fisheries	-

- (f) Increase the recording of individual landed species on catch records wherever possible

Background: The catch records database includes many references to unspecified fish of a particular species, (e.g. mullet, unspecified). The catch record category of mullet (unspecified) is believed to include landings of sea mullet, sand mullet and fantail mullet.

Increasing the accuracy of the reported landings of particular species will assist in the overall monitoring of those species. It is important, however, to acknowledge that requiring a resolution of information on catch records that is too high may indeed decrease the value of the data provided by forcing inaccurate identifications and entries. Implementation of this management response is to include consultation with the Ocean Hauling MAC to determine the most effective way of obtaining quality information, and may require changes to the catch records used in the fishery.

Contributing to Goals	Timeframe	Responsibility	Authority
1,2,4,8	From July 2003	NSW Fisheries and OH fishers	-

Objective 8.3 To improve knowledge of social and economic aspects of the fishery

Other important responses: 5.2a-c; 5.3a; 7.1a

- a) Consult with the Ocean Hauling MAC on the development of a strategy for improving the understanding of economic and social information relating to the Ocean Hauling Fishery, taking into account the information gaps outlined in the economic and social assessment in the Environmental Impact Statement for the fishery.

Background: An economic and social survey conducted as part of the environmental assessment process has provided some limited information on economic and social issues in the Ocean Hauling Fishery. The Environmental Impact Statement identified a number of information gaps and provided recommendations for further investigation of economic and social issues.

Contributing to Goals	Timeframe	Responsibility	Authority
4,5,7	By July 2005	NSW Fisheries	-

- b) Assess, in consultation with the Ocean Hauling MAC, the feasibility of gathering additional information on social and/or economic aspects of the Ocean Hauling Fishery including:
- i) modifying the existing catch returns or fishing licence renewal application forms
 - ii) undertaking targeted social and economic surveys
 - iii) any other methods of gathering the desired information

Background: The gathering of social and economic information will aid in understanding the implications of changes to fishing rules over time. Some information gathering methods may be relatively simple and inexpensive to implement whilst others, like targeted surveys, are likely to be more resource intensive. Consideration will need to be given to the quality of information likely to be received through different information gathering techniques.

Contributing to Goals	Timeframe	Responsibility	Authority
4,5,7	By July 2005	NSW Fisheries OH MAC	-

9. Performance Monitoring and Review

a) Performance monitoring

The complex nature of the Ocean Hauling Fishery means that many of the management responses assist in achieving multiple goals. Therefore, rather than examining the performance of each individual response or objective, it is more efficient and appropriate to measure the performance of the management strategy against the eight goals (i.e. the major objectives). An annual report will, however, be prepared (as outlined later in this section) detailing the progress made in implementing each of the management responses.

i) Performance indicators

The performance indicators provide the most appropriate indication of whether the management goals are being attained. A number of monitoring programs are to be used to gather information to measure performance indicators. These performance indicators and associated monitoring programs are detailed later in this section in Table 15.

With the implementation of the new research proposals for the fishery outlined in section 6, a broader information base relating to the fishery and its impacts may allow for more precise performance indicators to be developed.

ii) Monitoring programs

Monitoring programs collect the information used to measure the performance indicators. Monitoring programs may be specific to the fishery, or encompass cross fishery interactions such as the catch of a species by several commercial fisheries or harvest sectors. Table 15 identifies the information sources and monitoring programs used as part of the performance monitoring and review process for the Ocean Hauling Fishery.

iii) Trigger points

The trigger points specify the point when a performance indicator has reached a level that suggests there may be a problem with the fishery and a review is required.

Some performance indicators vary naturally from time to time. Trigger point levels have been selected to be well within the expected natural range of variation. This means that the trigger will be exceeded more frequently because of natural variation in the performance indicator than because of a problem in the fishery. If the natural variation of the performance indicator is known, then the trigger level will be set so that the performance indicator will be outside the range where the 80% of most common observations fall.

Table 15 establishes the performance indicators and trigger points that will be used to measure whether each of the management goals described in section 4 of this management strategy are being attained.

Table 15. Performance indicators, monitoring programs and triggers points to measure the success of each of the goals of the fishery

GOAL 1. To manage the Ocean Hauling Fishery in a manner that promotes the conservation of biological diversity in the coastal environment					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
1.1	[Performance indicators need to be developed to monitor biodiversity impacts at the species, community and ecosystem levels]	A monitoring program for this indicator cannot be developed until a performance indicator has been selected		[No trigger point set at this stage]	There are no available performance indicators to measure the impact of this fishery on biodiversity. As such, surrogate indicators will be used (below) until a suitable indicator is developed. As indicated in management response 1.3b, the development of performance indicators will involve extensive scientific collaboration and is likely to take some time.
1.2	Area of beach totally closed to commercial fishing (through fishing closures, marine parks and/or aquatic reserves)	Review number and area of beaches totally closed to commercial fishing every 2 years	Begin 2004 and review every two years	The area open to beach hauling increases after the commencement of the strategy	Significant closed areas prevent any direct impacts of the fishery on biodiversity in those areas, thus minimising the total impact on biodiversity at the regional or State-wide scale
1.3	Response of the fishery to marine pest and disease incursions	Reports relating to the monitoring of marine pests and diseases will be provided to the Ocean Hauling MAC through the marine pest management program on results of monitoring marine pests and diseases	Ongoing	The Director, NSW Fisheries, determines that the fishery has not responded appropriately to marine pest and disease management programs that recommend that ocean haul fishing be modified as a result of marine pest or disease incursions	The marine pest and disease management program is responsible for monitoring marine pests and diseases, and developing contingency plans in the event of new incursions. Section 210 of the FM Act provides an offence for selling noxious fish. This performance measure ensures that the fishery is responsive to existing or threatening marine pest or disease incursions.

GOAL 2. To maintain fish populations harvested by the Ocean Hauling Fishery at ecologically sustainable levels					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
2.1	Total annual commercial landings of the target species	Annual analysis by NSW Fisheries scientists, in consultation with the Ocean Hauling MAC, of NSW commercial catch returns and other relevant data from adjacent jurisdictions, where available. Reports scrutinised in March/April and final report made available in June of each year	Begin 2003 and ongoing subject to annual review	See Table 3	A further set of trigger points in addition to those in Table 3 will be developed in order to detect undesirable trends in catch data (see section 5(g) of this management strategy)
2.2	Stock assessment of target species	Monitoring of commercial landings	Ongoing	See section 5(D)(i) of this management strategy	
		Estimates of non-commercial harvest	Estimates available July 2005		
		Observer-based program provides estimates of size composition of landings and discards of target species. Data also assist with selectivity estimates Various species-specific programs	Begin January 2003 and ongoing subject to annual review As per successful funding		
2.3	Proportion of catch comprised of target species	Annual analysis by scientists and industry of commercial catch returns. Reports scrutinised in March/April and final report made available in June of each year	Begin 2004 and ongoing subject to annual review	Catch of target species is below 95% of total landings for any method	With target species defined for each method, this provides a means of detecting shifts in targeting, should they arise
2.4	Estimate of total quantity (annual rate) of discarded catch by method	Observer-based program that provides discard estimates of all fishing methods stratified throughout the regions	Begin January 2003 and ongoing subject to annual review		

GOAL 2. (Continued) To maintain fish populations harvested by the Ocean Hauling Fishery at ecologically sustainable levels					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
2.5	Ratio of discarded catch compared with total landings by method	Observer-based program that provides a predetermined cover of all fishing methods in a predetermined number of key areas stratified throughout the regions	Begin January 2003 and ongoing subject to annual review		
2.6	Total commercial landings of non-target species from each method, in each region	Annual analysis by NSW Fisheries scientists, in consultation with the Ocean Hauling MAC, of NSW commercial catch returns	Begin 2003 and ongoing subject to annual review	Total landings of all non-target species exceeds 5% total harvest for any method in any region per year	Non target species total to include conditional target species and other landed species (byproduct)
2.7	Capability to limit effort through minimum shareholdings in place within two years of share management plan commencement	A review of the provisions of the share management plan with respect to minimum shareholdings will be conducted by NSW Fisheries and the MAC	2 years from the implementation of the share management plan	Minimum shareholdings not set by method and region (for hauling methods) within two years	There must be a realistic measure of fishing effort for each ocean hauling sector. Once identified, this measure is monitored for change beyond normal variation
2.8	Total annual landings of species other than the target species	Annual analysis by NSW Fisheries scientists, in consultation with the Ocean Hauling MAC, of NSW commercial catch returns	Begin 2003 and ongoing subject to annual review	Landings are outside the range of catch for two consecutive years, with the range calculated from the period 1984/85 to 1998/99 (see comments)	Catches for some byproduct have been reported as zero in previous years. Despite this, a zero catch recorded in any future year will be considered as outside the acceptable range specified in this strategy
2.9	Total annual commercial landings of each species from each gear type within each region fished	Annual analysis by NSW Fisheries scientists, in consultation with the Ocean Hauling MAC, of NSW commercial catch returns	Begin 2003 and ongoing subject to annual review	Landings in any one region changes by at least 50% between any two consecutive years*	Changes in targeting or species composition may be more easily detected at a regional level

GOAL 3. To promote the conservation of threatened species, populations and ecological communities associated with the operation of the Ocean Hauling Fishery					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
3.1	Number of incidental captures of listed threatened species, population or ecological community	Observer-based program that provides estimates of capture rates for all fishing methods	Begin 2003 and ongoing subject to bi-annual review	[No trigger point set at this stage]	Data will be sourced from the scientific observer program. The design phase of the observer program will include and initially focus on species and/or locations most likely to be at risk to aid in the design of the overall program.
3.2	Response of the fishery to threatened species declarations	Reports will be provided to the Ocean Hauling MAC containing recommendations from the Director, NSW Fisheries and/or the Director-General of the National Parks and Wildlife Service where appropriate actions may be needed to conserve threatened species, populations and ecological communities.	Ongoing	Threatened species recovery plan or threat abatement plan requires a modification to fishing which the Director, NSW Fisheries considers is not adequately provided for elsewhere in this management strategy	The NSW Fisheries Office of Conservation and NSW National Parks and Wildlife Service monitor sightings of threatened species and develop threatened species recovery plans as required

GOAL 4. To appropriately share the resource and carry out fishing in a manner that minimises social impacts					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
	Estimates by NSW Fisheries of the catch of target species for all non-commercial sectors (including recreational, charter boat, aquaculture and Indigenous	Any relevant stratified creel surveys, analysis of charter boat logbooks, aquaculture records, discussions with Indigenous stakeholders and compliance reports	Begin 2005 and ongoing subject to annual review	Estimates not available within three years from the commencement of the management strategy	This relates to the need to have accurate harvest information from all sectors. This information will also be considered during the preparation of stock assessments
4.1	Catch levels (including estimates) from the commercial, recreational and Indigenous sectors	Annual analysis by NSW Fisheries, in consultation with the Ocean Hauling MAC, of NSW commercial catch returns	Begin 2004 and ongoing subject to annual review	After estimates become available, relative catch levels between sectors shifts by 25% within the first five years of the strategy	This relates primarily to the objective of monitoring and managing equitable allocations between fishing sector groups
4.2	Catch levels of species taken in the Ocean Hauling Fishery, relative to other commercial fisheries and among regions within the fishery	Annual analysis by NSW Fisheries, in consultation with the Ocean Hauling MAC, of NSW commercial catch returns	Begin 2004 and ongoing subject to annual review	Relative catch levels between commercial fisheries shifts by 25% within the first five years of the strategy	This relates primarily to the objective of monitoring and managing equitable allocations between commercial fisheries
4.3	Total annual commercial landings taken in each region	Annual analysis by NSW Fisheries, in consultation with the Ocean Hauling MAC, of NSW commercial catch returns	Begin 2003 and ongoing subject to annual review	Catch levels between any two regions shifts by 25% within the first five years of the strategy	This relates to the objective of monitoring and managing equitable allocations within the fishery
4.4					

GOAL 5. To promote a viable commercial fishery (consistent with ecological sustainability)					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
5.1	Annual median gross return of ocean hauling fishers derived from commercial fishing in NSW	Part of the annual review will involve calculating the median gross return of fishers endorsed in the ocean hauling fishery, by multiplying their monthly catches with the respective average Sydney Fish Market price (or other agreed price information).	Ongoing subject to annual review	Median has not increased after four years of commencement of the share management fishery plan	This relates to income from the Ocean Hauling Fishery. This measure would be expected to vary much more than an industry-wide measure and would need a longer time to detect change
5.2	Average market value of ocean hauling shares	The market value of shares will be collected and recorded by the Share Registrar upon each share transfer. The average market value will be calculated each year as part of the annual review	Ongoing subject to annual review	No trigger point set at this stage	It is not possible to predict how the value of shares will change during the first few years of share trading. However, once the trading period with increased minimum shareholdings has stabilised average share value may be a good indicator of economic status of the fishery
5.3	Viability of Ocean Hauling Fishery and businesses therein	Performance indicator and associated monitoring to be developed	From July 2005	[No trigger set at this stage]	This will assist in the measuring of economic viability on an industry-wide basis and on the fishing business level

GOAL 6. To ensure cost-effective and efficient ocean hauling management and compliance programs					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
6.1	Overall rate of compliance with endorsed ocean hauling fishers, measured as a percentage of comply versus non-comply	The compliance rate will be calculated as part of the annual review using the Project Activities Summary Reports (PARS) that are completed by the Field Services Branch	Ongoing subject to annual review	Overall rate of compliance with the strategy, as estimated by the Director of NSW Fisheries, falls below 85%	The ocean hauling compliance rate during the 1999/00 financial year was 98%, and the indication is that this trend will continue through the 2000/01 period. The statewide Operational Compliance Plan will identify 'serious' offences as defined in the forfeiture offences and proposed penalty points system under section 4 of this management strategy. Significant increases in forfeiture and penalty point system offences will trigger appropriate responses under Goal 6
6.2	Number of MAC meetings held each year	The number of ocean hauling MAC meetings held will be determined as part of the annual review based on the records held by NSW Fisheries	Ongoing subject to annual review	Less than two meetings held in a calendar year, unless otherwise agreed by the MAC	Holding 2 MAC meetings per year is currently a requirement of the Regulation
6.3	Occasions when this strategy is in direct conflict with other approved Commonwealth or State programs	The major parallel programs will be reviewed as part of the annual review, but others may be reported to NSW Fisheries and the Ocean Hauling MAC on a case by case basis	Ongoing subject to annual review	Any occasion when the Director, NSW Fisheries, determines that this management strategy is inconsistent with other approved Commonwealth and State programs	This includes programs such as the aquatic biodiversity strategy, marine parks and aquatic reserves program
6.4	Performance of NSW Fisheries meeting needs of MAC as per the Commercial Fisheries MAC Procedures Manual	NSW Fisheries service agreement	Ongoing subject to annual review	NSW Fisheries fails to meet guidelines in 20% of communications with MAC	

GOAL 7. To improve public understanding of the Ocean Hauling Fishery and of the resources upon which the fishery relies					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
7.1	Annual publication of fishery information according to fishery education strategy	Strategy determines means and frequency of information dissemination	Ongoing subject to annual review	Annual publication missed or incomplete	
7.2	The development and implementation by NSW Fisheries in consultation with the MAC of an education strategy for the fishery		By July 2003	Education strategy not developed within two years of commencement of the management strategy	An education and communication strategy for the fishery will include what information is to be published and by what means

GOAL 8. To improve knowledge of the Ocean Hauling Fishery and the resources upon which the fishery relies					
No.	Performance indicator	Monitoring program	Time frame	Trigger point	Comments
8.1	Total commercial landings of all species from each net within each region fished	Annual analysis by scientists and industry of commercial catch returns. Reports scrutinised in March/April and final report made available in June of each year.	Begin 2004 and ongoing subject to annual review		
8.2	Total level of funding committed to research projects that provide a flow of benefits to the Ocean Hauling Fishery	Annual review of total research funding from consolidated and external funds that are being spent on Ocean Hauling Fishery	Begin 2002 and ongoing subject to annual review	To be determined	Part of annual reporting on fishery status should include expenditure on research for the fishery
8.3	Number of research grant applications submitted to external funding agencies annually relating to the Ocean Hauling Fishery	via the Ocean Hauling MAC submit at least one grant application, that relates to the fishery, to external funding agencies annually	Begin 2003 and ongoing subject to annual review	Less than two such applications submitted in a year	The outcome of such grant applications can not be guaranteed
8.4	Accuracy of catch return data measured every two years	Analysis of comparisons of catch return records with Fish Receiver data and compliance data, and observer-based surveys every two years	Begin 2003 and ongoing subject to annual review	The Director, NSW Fisheries, determines that accuracy of data has not improved (assessment of data accuracy is integral to the stock assessment program)	Accuracy will be measured by undertaking comparisons with receiver records using a sample of endorsement holders and by comparison of data from observer program
8.5	Rate of successful external research funding applications relating to the Ocean Hauling Fishery, measured as a percentage	No monitoring program will be identified until a performance monitor has been developed	To be determined	The percent of successful external research funding applications falls below 30% each year in two consecutive years	30% is considered to be an adequate benchmark for successful external applications. It is, for example, the approximate historical average success rate for FRDC applications

* Landings and benchmarks should not include catches taken in areas or by ear types that are not available to commercial fishers as a result of other programs that impact on the operation of the fishery (e.g. the declaration of recreational fishing areas or aquatic reserves).

b) Predetermined review of performance indicators and trigger points

It is likely that changes to the activities authorised under the management strategy will evolve over time. It is also likely that better performance indicators will become apparent over the course of the next few years and it would then be an inefficient use of resources to continue monitoring the performance indicators that appear in the management strategy. If new information becomes available as a result of research programs, more appropriate performance indicators and trigger points can be developed and the management strategy may be amended by the Minister for Fisheries accordingly.

A comprehensive review of the appropriateness of all performance indicators and trigger points will be carried out not more than two and a half years from the commencement of the management strategy, in consultation with the Ocean Hauling MAC.

As new or improved guidelines for fishery reporting become available, such as those being considered in the *'National ESD Reporting Framework for Australian Fisheries – the how to guide for wild capture fisheries report'*, they will be taken into account to promote continuous improvement in the management of the fishery.

c) Reporting on the performance of the management strategy

There are two types of reporting provided for under this management strategy. The first of these reports on each of the performance indicators specified for each management goal. The other type is reporting on the progress in implementing the provisions of the management strategy. Both types of reporting are discussed in further detail below.

i) Review report in response to trigger points

If the trigger point for a performance indicator is breached, a review is to be undertaken of the likely causes for the breach. Any such review is to include consultation with the Ocean Hauling MAC. In some circumstances, the breach may be related to a performance indicator that measures broader cross fishery issues and will require consultation with other management advisory committees or the Ministerial advisory councils. Cross fishery issues are most likely to involve catch levels of a species that is harvested in more than one fishery.

NSW Fisheries will collect and analyse information relevant to the performance of the fishery, such as compliance rates, economic data, catch data and other statistics as the information becomes available and prior to preparation of reports relating to performance monitoring in the management strategy. This does not, however, prevent a review from being conducted at any other time should it become apparent that a performance indicator has breached a trigger point.

Once the relevant information is obtained an initial analysis against the trigger points will be undertaken by NSW Fisheries. Where the data or information indicate that a trigger point has been breached, details will be provided to the relevant fishery MACs and the relevant Ministerial advisory councils. Consultation will then occur with the Ocean Hauling

MAC and other relevant advisory bodies either through a meeting or out of session. During this consultation, advice will be sought on performance indicators that have been breached and the suspected reasons for any breaches. During this consultation the MAC will also be able to provide advice on the preparation of any review reports that are required.

A review report outlining the remedial actions recommended in response to trigger point breaches, is to be provided to the Minister for Fisheries.

Reviews arising from landings data exceeding trigger points should consider, but not be limited to, the following factors:

- changes in the relative catch levels among harvest sectors (including those beyond NSW jurisdiction)
- new biological or stock information (from any source) available since the most recent review of the species
- changes in the activities or effectiveness of fishing businesses targeting the species
- changes in principal markets or prices for the species
- environmental factors.

Review reporting should include whether the suspected reasons for the trigger point being breached are the result of a fishery effect or an influence external to the fishery, or both.

If a review concludes that the reasons for the trigger point being breached are due to the operation of the fishery, or if the fishery objectives are compromised if the fishery continued to operate unchanged, management action must be taken with the objective of returning the performance indicator to an acceptable range within a specified time period. The nature of any remedial action proposed may vary depending on the circumstances that have been identified as responsible for the trigger point being breached.

If a review considers that the management objectives or performance monitoring provisions are inappropriate and need to be modified, the strategy itself may be amended by the Minister for Fisheries. If the reasons are considered to be due to the impacts on the resource from factors external to the fishery, these factors should be identified in the review and referred to any relevant managing agency for action.

A review may recommend modifications to any fishery management strategy that allows harvesting of that species. This approach to the review process will avoid triggering multiple reviews for a species which is caught in multiple fisheries.

There may be circumstances where no change to management arrangements or the management strategy is deemed necessary following the review. For example, a review could be triggered because the landed catch of a species declines. However, there would be little cause for concern over the performance of the management strategy if the decline in landed catch of a species was clearly caused by a drop in market prices. Any price fluctuations can result in fishers adjusting their activities.

If a review considers that the management objectives or the performance monitoring provisions are inappropriate and need to be modified, the management strategy itself may be amended by the Minister for Fisheries. If the reasons are considered to be due to impacts on

the resource from factors external to the fishery, these factors should be identified in the review and referred to the relevant managing agency for action.

All review reports will be publicly available.

ii) Annual performance report

An annual performance report assessing the performance of the fishery will be submitted to the Minister for Fisheries each year following the review of trigger points by the MAC. This is to commence in 2004 and the report is to be submitted to the Minister for Fisheries within six months of the Ocean Hauling MAC being consulted over the development of the report. The annual performance report is the formal mechanism for reporting on performance indicators and trigger points, and will be made publicly available. This report will also include a review of progress made in implementing each of the management responses. The annual performance report will be submitted to the Minister for Fisheries in conjunction with performance reports for other relevant fishery management strategies.

The vast majority of management responses in the management strategy are linked to specified implementation timeframes. Some of these management actions are subject to specific trigger points that ensure reviews and appropriate remedial actions if the target timeframes are not met.

If the performance report identifies that any specified target timeframe has not been met, a review will be undertaken and any necessary remedial measures recommended to the Minister².

The fishery will continue to be regarded as being managed within the terms of the management strategy whilst any remedial measures associated with breaches in timeframes or triggering of performance indicators are being considered through the review process and/or by the Minister for Fisheries.

d) Contingency plans for unpredictable events

In addition to the circumstances outlined above, the Minister for Fisheries may order a review and/or make a modification to the management strategy in circumstances declared by the Minister for Fisheries as requiring contingency action, or upon the recommendation of the Ocean Hauling MAC. In the case of the former, the Minister must consult the Ocean Hauling MAC on the proposed modification or review.

These circumstances may include (but are not limited to) food safety events, environmental events, results of research programs or unpredictable changes in fishing activity over time. The Minister may also amend this fishery management strategy if matters identified during the finalisation of any other fishery management strategy indicate that a modification is necessary.

² In some circumstances a required action may be completed outside the scheduled timeframe, but prior to the commencement of the review (e.g. an action was due for completion by September 2003, but it is actually completed in October 2003). When this occurs, it is not necessary to proceed with a review.

Notwithstanding the above, the Minister may also make amendments to the management strategy that the Minister considers to be minor in nature at any time.

e) Monitoring performance of stock assessment

Stock assessment involves the use of various statistical and mathematical calculations to make quantitative predictions about the reactions of fish populations to alternative management choices (Hilborn and Walters, 1992). These calculations can vary from simple graphical presentations of commercial landings to sophisticated computer models that predict the biomass of the stock under various harvest regimes. The data and the scientific expertise required to apply these methods varies enormously. Stock assessment processes for the Ocean Hauling Fishery need to be defined to suit the resources available. To achieve this outcome, short-term and long-term approaches will be applied.

The short-term approach will be to use landings of target species to monitor the performance of this fishery. Within 12 months of the commencement of the management strategy a stock assessment process for target species will be developed. The process needs to be appropriately based on the data available and the value of this fishery. This will be the long-term approach that will be used to assess the target species of this fishery. Two principles will apply to the long-term proposal for stock assessments:

- assessment methods will be consistent with the data (i.e. the assessment program design will not rely on data sources that are not funded)
- assessment methods will be at least equivalent to approaches for fisheries of similar value in other Australian jurisdictions.

The exact methods that will be proposed may require the development of novel approaches. Trigger points will be an integral component of the stock assessment proposal for each species. An independent review of the assessment methods will be completed within three years of the proposal being developed, with the following terms of reference, to:

- report upon the technical soundness of the assessment methods proposed
- report upon the cost-effectiveness of the assessment methods proposed
- indicate if the assessment process will be likely to provide timely information for the management of the fishery
- report upon the conditions where the assessment process is likely to be unsatisfactory
- recommend revisions to the proposed approach including additional data collection strategies that should be considered.

The schedule for providing stock assessments can not and should not be the same for all target species. Priorities for each species should be determined in consultation with the assessment scientists and the appropriate MACs.

f) **Setting trigger points for monitoring changes in commercial landings**

A system to detect undesirable changes in landings will be used while stock assessments are being developed for target species. This primary monitoring tool is also likely to be in place for an extended period for the many species of low value (and/or catch) that do not have better estimates of stock status. As biological reference points become available from stock assessments, monitoring based solely on landings will be phased out.

Systems for monitoring based on landings only are rarely formalised, as proposed in this management strategy, and published examples of such systems could not be found. However, the large number of species caught in most NSW fisheries means that some species must remain a relatively low priority for stock assessment. For these species, monitoring landings is the only practical choice.

A more sophisticated treatment of catch data often used in stock assessments is catch per unit effort (or CPUE) analysis. However, caution must be taken in analysing CPUE information for the reasons described in the box below.

Note on the use of catch per unit effort as an indicator of relative abundance

It is tempting to consider that there is a simple relationship between fish stock abundance and catch which has been scaled by units of fishing effort (known as catch per unit of effort or CPUE). Most stock assessment models assume that CPUE is directly proportional to stock abundance. This can only be the case if fishing effort is randomly distributed, and we know that this is seldom the case. Some fisheries target aggregations of fish, which can mean that CPUE stays high, even as total abundance drops because the remaining fish continue to aggregate.

The correct use of fishing effort data requires a good knowledge of the biology of each species that it is applied to, so that its spatial distribution can be adequately considered. Information about fishers' behaviour and gear is also important so that effort units can be standardised and changes over time can be accounted for.

An index of relative abundance based on CPUE is likely to be biased when applied to a range of species, even when caught by the same gear (Richards and Schnute, 1986). This means the application of CPUE information from commercial catch records would need to be adjusted for each species.

Finally, CPUE series need to take account of changes in reporting (see Pease and Grinberg, 1995) or other changes that may have changed catchability. The difficulties as they relate to the NSW Estuary General Fishery are discussed in Scandol and Forrest (2001). For these reasons, CPUE has not been used in the development of initial performance indicators and trigger points in this management strategy.

The aim of trigger points based on changes in catch is to force a review of a species' circumstance when landings go beyond a reasonable expected range. Trigger points must be set at a level where they are sensitive enough to be likely to register a real problem but not so sensitive that they constantly trigger when there is no need for a review.

Trigger points will be set in a precautionary manner relative to known levels of variation in annual catch levels. That is, trigger levels will be set to be within the known range of past landings variation, leading to the expectation of "false alarms". This is desirable insurance that ensures reviews will be done when management action is needed.

There are a number of factors that must be considered when selecting a trigger level based on performance of fishery or species landings:

- level of variation in recorded historic landings
- management changes over time that may affect landings levels
- changes in the catch recording system that limit interpretation of landings data
- relevant environmental events
- changes in activities by important harvesters of that species.

All these factors have and will continue to influence how changes in catch can be interpreted.

The landings-based trigger points are designed to measure different types of changes in catch of the target species.

The first type of trigger point is designed to cause a review when landings change dramatically from one year to next – the “single year trigger”. The change that triggers a review is not an unprecedented change but rather a change that was well within the normal range of variation, but expected infrequently (perhaps once every five to ten years). The single year triggers are based on the variation in year-to-year changes in the historical catch data. The trigger points are set at a level of change that occurs less than 20% of the time. In other words, changes that are at least as large as the largest 20% of historical changes will trigger a review. This level of change is chosen to ensure that there will be a review if there is a dramatic change in the circumstances of the fishery over a short period. Setting the trigger points this way means accepting the inevitable “false alarms” when the performance indicator is at the edge of its natural range. The review will determine which trigger breaches are “false alarms”. The reference level for this short term trigger will be the landings level from the previous year.

The second type of trigger point is designed to detect patterns in landings that are of sufficient concern to require a review (e.g. a downward or upward trend over several years). Time series of landings for any commercial species are likely to be correlated from one year to the next (i.e. the level of landings one year is related to the level of landings in one or more previous years.) This type of data structure will complicate the analysis of trends in landings. It is not a trivial exercise to devise an objective system to force a review when catch data exhibit certain patterns. For example, downward trends in landings should cause concern but the monitoring system must consider the importance of the rate of decline and the time period over which the decline occurs. The analysis must address the likelihood of relationships between data points and any relevant biological considerations (e.g. does the species come from a group that is known to be relatively long- or short-lived?)

The assistance of a statistical expert has been sought to develop an objective system for defining trigger points that detect concerning trends in landings. The system will be developed and tested during the first nine months of the management strategy and applied to all species taken in the fishery when the first performance report is prepared. The system may involve several different measures, including the steepness of the trend and the period over which the trend occurs.

g) How trigger points based on landings will be applied

The single year trigger is explained in the examples shown in Figure 3. These examples below explain how the single year trigger points will work with a hypothetical starting point (five years ago), trigger levels and existing catch data.

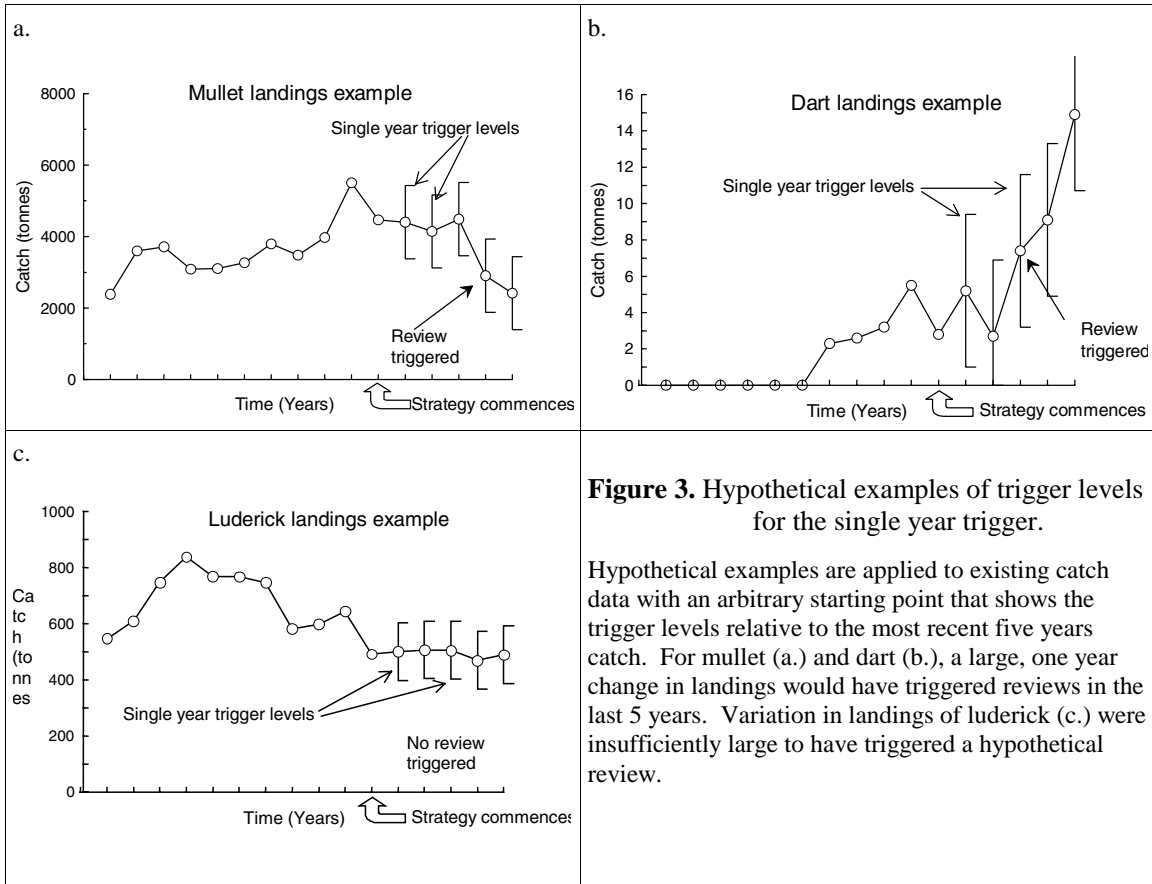


Figure 3. Hypothetical examples of trigger levels for the single year trigger.

Hypothetical examples are applied to existing catch data with an arbitrary starting point that shows the trigger levels relative to the most recent five years catch. For mullet (a.) and dart (b.), a large, one year change in landings would have triggered reviews in the last 5 years. Variation in landings of luderick (c.) were insufficiently large to have triggered a hypothetical review.

Table 16. Levels of trigger points for single year trigger.

Note: These levels will apply for the first year of the management strategy only. At each annual review the trigger levels for the next year will be calculated, using the most recent year of catch data as the new reference level. The average annual change was calculated over the 16 years commencing in 1984/85 except for sweep, bonito and dart, where records commenced in 1990/91. All values in the table are in tonnes. Please note that reference to 'CI' in the Average annual change column refers to 'confidence intervals'

Target species	Reference level (99/00 catch)	Average annual change (+ 80% CI)	First year upper trigger	First year lower trigger
Sea mullet	2412.9	1022.0	3434.9	1390.9
Blue mackerel	546.3	256.4	802.6	289.9
Luderick	489.6	102.9	592.5	386.7
Yellowtail	472.9	77.8	550.6	395.1
Australian salmon	361.9	476.1	837.9	0.0
Silver trevally	300.9	275.3	576.1	25.6
Yellowfin bream	281.5	101.7	383.2	179.8
Bonito	191.5	63.9	255.4	127.6
Sand whiting	128.2	38.7	166.9	89.5
Sandy sprat (whitebait and glass fish)	76.1	40.3	116.4	35.8
Pilchards	65.2	132.8	198.0	0.0
Sweep	47.9	50.0	97.9	0.0
Anchovy	38.2	21.2	59.4	17.0
Sea garfish	37.4	91.9	129.3	0.0
Jack mackerel	19.4	337.7	357.1	0.0
Dart	14.9	4.2	19.1	10.7

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Appendix 1 Description of ocean hauling gear

General conditions

(i) Variation to the ocean waters boundary occurs along the coast. Please refer to the Fisheries Management (General) Regulation 2002 for a detailed definition of ocean waters along the NSW coast.

(ii) Variations to regulated ocean hauling activities may occur in waters deemed as marine protected areas, aquatic reserves or Intertidal Protected Areas.

(iii) Species identified as threatened species, endangered species or vulnerable species under Schedules 4 and 5 of the *Fisheries Management Act 1994* cannot be taken in ocean hauling operations.

(iv) Where Australian salmon is listed as a target species, it may only be targeted south of Barrenjoey headland.

(v) Species with a prohibited size limit may be taken in a general purpose hauling net, however, only when greater than the applicable size limit.

Table 1. Hauling net (General Purpose).

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Ocean waters and sea beaches	Ocean waters and sea beaches
Time		24 hour operations subject to seasonal and weekend closures
General Description	Includes hauling lines The length of each hauling line does not exceed total length of the net to which it is attached	Includes hauling lines The length of each hauling line does not exceed total length of the net to which it is attached
Total Length	1 March to 31 July each year- maximum 400 m	1 March to 31 July each year- maximum 400 m
Mesh size, Bunt or Wings	1 August to 28 February Mesh of wings not < 80 mm Mesh of Bunt not < 50 mm Bunt not > 1/3 total net length 1 March to 31 July each year Mesh of wings 65 to 86 mm Mesh of bunt 50 to 65 mm Bunt not > 1/3 total net length	1 August to 28 February Mesh of wings not < 80 mm Mesh of Bunt not < 50 mm Bunt not > 1/3 total net length 1 March to 31 July each year Mesh of wings 65 to 86 mm Mesh of bunt 50 to 65 mm Bunt not > 1/3 total net length
Rings ?		No Rings
Method of Use	The net is used only by the method of hauling The hauling net, once shot (any part other than the hauling line) is continued without interruption or delay until completed upon which any fish are immediately removed	To be shot from to the beach and retrieved to the beach The net is used only by the method of hauling The hauling net, once shot (any part other than the hauling line) is continued without interruption or delay until completed upon which any fish are immediately removed
Relationship to Boat		
Target Species	All species	Sea mullet, Australian salmon, luderick, yellowfin bream, unspecified mullet, dart, blue mackerel, sand whiting
Conditional Target Species		Leadenall (frigate mackerel), fantail mullet, mackerel tuna, mullet, northern bluefin tuna, tarwhine, bonito, silver trevally, diamond fish, yellowfin tuna, sweep, spanish mackerel, bigeye tuna
Byproduct Limit		In each region for each method (net type), no more than 5% of the annual landed catch must be comprised of byproduct species (all other species). On a shot-by-shot basis, not more than 20% of the catch can be byproduct species. However, the total weight of any conditional target species may exceed 20% in a given shot
Minimal No. of Fishers Required	The net is operated by at least two commercial fishers	The net is operated by at least two appropriately endorsed commercial fishers
Additional Conditions	The net has a bunt in the centre and two wings of equal length OR the bunt is located between the end of the net first cast or shot and the centre of the net.	The net has a bunt in the centre and two wings of equal length OR the bunt is located between the end of the net first cast or shot and the centre of the net.

Table 2. Hauling net (General Purpose) in Jervis Bay.

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	All other waters (except inland waters)- includes Jervis Bay	Jervis Bay
Time		24 hour operations subject to seasonal and weekend closures
General Description	Includes hauling lines	Includes hauling lines
Total Length	Maximum length- 375 m	1 August to 28 February Maximum length- 375 m 1 March to 31 July Maximum length- 400 m
Mesh size, Bunt or Wings	Bunt does not exceed 90 m or 1/4 of total length of net (whichever is lesser) centre piece not > 50 m nor < 25 m in length Mesh- not > 50 m in length Remainder of bunt- not > 50 m, mesh not < 50 mm Mesh of wings- not < 80 mm	1 August to 28 February Bunt does not exceed 90 m or 1/4 of total length of net (whichever is lesser) centre piece not > 50 m nor < 25 m in length Mesh- not > 50 m in length Remainder of bunt- not > 50 m, mesh not < 50 mm Mesh of wings- not < 80 mm 1 March to 31 July each year Mesh of wings 65 to 86 mm Mesh of bunt 50 to 65 mm Bunt not > 1/3 total net length
Rings ?		No rings
Method of Use	The net is used only by the method of hauling. The hauling net, once shot (any part other than the hauling line) is continued without interruption or delay until completed upon which any fish are immediately removed	To be shot from to the beach and retrieved to the beach The net is used only by the method of hauling. The hauling net, once shot (any part other than the hauling line) is continued without interruption or delay until completed upon which any fish are immediately removed
Relationship to Boat		
Target Species	All species	Sea mullet, Australian salmon , luderick, yellowfin bream, unspecified mullet, dart, blue mackerel, sand whiting
Conditional Target Species		Leadenall (frigate mackerel), fantail mullet, mackerel tuna, mullo way, northern bluefin tuna, tarwhine, bonito, silver trevally, diamond fish, yellowfin tuna, sweep, spanish mackerel, bigeye tuna
Byproduct Limit		In each region for each method (net type), no more than 5% of the annual landed catch can be byproduct species (all other species). On a shot-by-shot basis, not more than 20% of the catch can be byproduct or conditional target species
Minimal No. of Fishers Required	The net is operated by at least two commercial fishers	The net is operated by at least two appropriately endorsed commercial fishers
Additional Conditions	The net has a bunt in the centre and two wings of equal length	The net has a bunt in the centre and two wings of equal length

Table 3. Garfish Net (Bullringing).

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	All other waters (excluding inland)	The Ocean Hauling MAC have recommended that this net be restricted to estuary waters only and become solely a part of the Estuary General Fishery
Time		
General Description		
Total Length	Maximum length- 275 m	
Mesh size, Bunt or Rings ?	Mesh throughout- not < 28 mm nor > 36 mm	
Method of Use	The net must be cast in a circle, immediately splashing the water in the vicinity, then picking up the net, all of which is to be completed in a continuous operation	
Relationship to Boat		
Target	Garfish	
Byproduct		
Minimal No. of Fishers		
Additional Conditions	The net is used between 1 February and 30 November each year	

Table 4. Garfish Net (Hauling).

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Ocean waters and sea beaches	Ocean waters and sea beaches
Time		
General Description		
Total Length		Maximum length- 300 m with rope not > 300 m
Mesh size, Bunt or Wings	Mesh throughout- not < 28 mm nor > 85 mm	Mesh throughout- not < 28 mm nor > 85 mm No mesh size tolerance
Rings ?		No rings
Method of Use	The net is used only by the method of hauling In offshore ocean waters the net is not landed by any method other than onto the tray of a boat	For beach based- shot and hauled to and from the shoreline The net is used only by the method of hauling For boat based-shot & hauled to and from a boat In offshore ocean waters the net is not landed by any method other than onto the tray of a boat
Relationship to Boat		Only one boat to be used in the operation of the net Cannot haul from a boat whilst it is under power
Target Species	Garfish	Sea garfish
Byproduct Limit	All other fish besides prohibited size fish taken while taking garfish	In each region for each method (net type), no more than 5% of the annual landed catch can be byproduct species (all other species). On a shot-by-shot basis, not more than 20% of the catch can be byproduct species Any species of fish with a prohibited size limit cannot be landed
Minimal No. of Fishers Required		The net is to be operated by at least two appropriately endorsed commercial fishers
Additional Conditions		Once shot, the net must be retrieved in a continuous motion

Table 5. Garfish Net (Hauling) in Jervis Bay.

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	That part of Jervis Bay within NSW, together with all the bays and beaches of that part, generally westerly from a line drawn between Point Perpendicular & Bowen Island	That part of Jervis Bay within NSW, together with all the bays and beaches of that part, generally westerly from a line drawn between Point Perpendicular & Bowen Island
Time		
General Description		
Total Length		Maximum length- 300 m with rope that's not > 300 m
Mesh size, Bunt or Wings	Mesh throughout- not < 28 mm nor > 36 mm	Mesh throughout- not < 28 mm nor > 36 mm
Rings ?		No rings
Method of Use	The net is used only by the method of hauling	For boat-based - shot & hauled to and from a boat. For beach-based - shot and hauled to and from the shoreline
Relationship to Boat		Only one boat to be used in the operation Cannot haul from a boat whilst it is under power
Target Species	Garfish	Sea garfish
Byproduct Limit	All other fish besides prohibited size fish taken while taking garfish	In each region for each method (net type), no more than 5% of the annual landed catch can be byproduct species (all other species). On a shot-by-shot basis, not more than 20% of the catch can be byproduct species Any species of fish with a prohibited size limit cannot be landed
Minimal No. of Fishers Required		The net is operated by at least two appropriately endorsed commercial fishers
Additional Conditions		Once shot, the net must be retrieved in a continuous motion

Table 6. Pilchard, Anchovy and Bait Net.

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Ocean waters and sea beaches	Ocean waters and sea beaches
Time		24 hour operations subject to seasonal and weekend closures
General Description	Includes hauling lines	Includes hauling lines with maximum length 500 m each
Total Length		Maximum length- 300 m
Mesh size, Bunt or Wings	Mesh throughout- not < 13 mm	Mesh throughout- not < 13 mm
Rings ?		No rings
Method of Use	The net is used only by the method of hauling	The net is used only by the method of hauling For boat-based- shot & hauled to and from a boat For beach-based- shot and hauled to and from the shoreline
Relationship to Boat		Cannot haul from a boat whilst it is under power
Target Species	Pilchards, anchovies, slimy mackerel	Pilchard, sandy sprat (whitebait & glass fish), blue mackerel, yellowtail, anchovy
Byproduct Limit	All other fish besides prohibited size class of fish, garfish or prawns	In each region for each method (net type), no more than 5% of the annual landed catch can be byproduct species (all other species). On a shot-by-shot basis, not more than 20% of the catch can be byproduct species Garfish, prawns or any species of fish with a prohibited size limit cannot be landed
Minimal No. of Fishers Required		The net is to be operated by at least two appropriately endorsed commercial fishers
Additional Conditions		Once shot, the net must be retrieved in a continuous motion

Table 7. Purse Seine Net.

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Ocean waters	Ocean waters
Time		24 hour operations subject to time and area
General Description		Any net with rings or purse rope is deemed to be a purse seine net A purse seine net is a net with a cork line and leadline with rings attached to the leadline
Total Length		Either maximum length- 1000 m or as prescribed by the net registration (whichever is less)
Mesh size, Bunt or Wings	Mesh throughout- not > 150 mm	Mesh throughout- not > 150 mm
Rings ?		Along the length of the leadline
Method of Use		To be shot and retrieved to the same vessel, continuous shot
Relationship to Boat		Net must be shot from a boat and retrieved to a boat
Target Species		Blue mackerel, yellowtail, pilchard, sweep, jack mackerel, Australian salmon, anchovy, sandy sprat (whitebait and glass fish), silver trevally, bonito
Byproduct Limit	All fish other than prohibited size class of fish, garfish, kingfish, tuna or prawns	No more than 5% of the annual landed catch can be byproduct species (all other species). On a shot-by-shot basis, not more than 20% of the catch can be byproduct species Garfish, kingfish, tuna, prawns or any species of fish with a prohibited size limit cannot be landed
Minimal No. of Fishers Required		
Additional Conditions		

Table 8. Purse Seine Net in Jervis Bay and Twofold Bay.

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Twofold Bay & Jervis Bay	Twofold Bay & Jervis Bay
Time		24 hour operations subject to time and area closures
General Description		Any net with rings or purse rope is deemed to be a purse seine net A purse seine net is a net with a cork line and leadline with rings attached to the leadline
Total Length	Maximum length- not > 275 m	Maximum length- not > 275 m
Mesh size, Bunt or Wings		Mesh throughout- not > 150 mm
Rings ?		Along the length of the leadline
Method of Use		To be shot and retrieved to the same vessel, continuous shot
Relationship to Boat		Net must be shot from a boat and retrieved to a boat
Target Species	All fish other than prohibited size class of fish, garfish, kingfish, tuna or prawns	Blue mackerel, yellowtail, pilchard, sweep, jack mackerel, Australian salmon, anchovy, sandy sprat (whitebait and glass fish), silver trevally, bonito
Byproduct Limit		No more than 5% of the annual landed catch can be byproduct species (all other species). On a shot-by-shot basis, not more than 20% of the catch can be byproduct species Garfish, kingfish, tuna, prawns or any species of fish with a prohibited size limit cannot be landed
Minimal No. of Fishers Required		
Additional Conditions		

Additional Gear Managed by the Ocean Hauling Fishery

Table 9. Purse Seine Net (Section 37 Permit).

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Ocean waters	Ocean waters only
Time	Permit issued for a year, must renew to continue	Permit issued for a year, must renew to continue
General Description	Must use registered purse seine net	Any net with rings or purse rope is deemed to be a purse seine net A purse seine net is a net with a cork line and leadline with rings attached to the leadline Must use registered purse seine net (registered in NSW)
Total Length		
Mesh size, Bunt or Wings	Mesh throughout- not > 150 mm	Mesh throughout- not > 150 mm
Rings ?		Along the length of the leadline
Method of Use		To be shot and retrieved to the same vessel, continuous shot
Relationship to Boat	May only be used from vessel specified on permit	May only be used from vessel specified on permit and that vessel must be licensed in NSW
Target Species	Pilchards (only where specified on permit), yellowtail, blue mackerel	Pilchards (only where specified on permit), yellowtail, blue mackerel
By-product Limit	None	None
Minimal No. of Fishers Required		
Additional Conditions	Permit is only current whilst holding Commonwealth permit Cannot take fish for sale Copy of permit must be carried at all times Yellowtail and blue mackerel may be retained and frozen for later use Pilchards may only be taken if on permit, and then only used as live bait for poling	Can only use whilst holding a current State permit State permit is only current whilst holding a current Commonwealth permit Cannot take fish for sale Copy of permit must be carried at all times Yellowtail and blue mackerel may be retained and frozen for later use Pilchards may only be taken if on permit, and then only used as live bait for poling Must submit monthly catch return form recording bait taken in NSW waters

Table 10. Submersible Lift Net (Bait).

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Ocean waters	Ocean waters
Time		
General Description		
Total Length	Maximum- 15 m length, 15 m width	Maximum- 15 m length, 15 m width
Mesh size, Bunt or Wings	Mesh throughout- not < 13 mm nor > 25 mm	Mesh throughout- not < 13 mm nor > 25 mm
Rings ?		
Method of Use		
Relationship to Boat		
Target Species	Blue mackerel, yellowtail and pilchards	Blue mackerel, yellowtail and pilchards
By-product Limit	None	None
Minimal No. of Fishers Required		
Additional Conditions	Only for the use as bait in the taking of tuna Not within 300 m from Park Beach bombora (153°9'08", 30°17'82") or within 200 m of Cook Island, Merimbula fishing platform and Tathra wharf	Only for the use as bait in the taking of tuna Not within 300 m from Park Beach bombora (153°9'08", 30°17'82") or within 200 m of Cook Island, Merimbula fishing platform and Tathra wharf

Table 11. Submersible Lift Net (Bait) in Jervis Bay and Twofold Bay.

Parameters	Current regulated definition	Recommended amendments to regulated definition
Area	Twofold Bay & Jervis Bay	Twofold Bay & Jervis Bay
Time		
General Description	Not within Twofold Bay west of a line between Snug Cove and Cattle Bay	Not within Twofold Bay west of a line between Snug Cove and Cattle Bay
Total Length	Maximum- 15 m length, 15 m width	Maximum-15 m length, 15 m width
Mesh size, Bunt or Wings	Mesh throughout- not < 13 mm nor > 25 mm	Mesh throughout- not < 13 mm nor > 25 mm
Rings ?		
Method of Use		
Relationship to Boat		
Target Species	Blue mackerel, yellowtail and pilchards	Blue mackerel, yellowtail and pilchards
By-product Limit	None	None
Minimal No. of Fishers Required		
Additional Conditions	Only for the use as bait in the taking of tuna	Only for the use as bait in the taking of tuna

Appendix 2 Closures affecting ocean hauling operations

Table 1. Beach Closures.

The following table is one section 8 closure under the Regulation covering beach closures in the Ocean Hauling Fishery first implemented 21 February 1997.

Region	Closed Beaches	Period of Closure
Region 1 <i>That part of NSW lying generally between the border between QLD and NSW and the parallel 29° 15' south latitude</i>	All beaches bounded by Point Danger at Tweed Heads south of Goanna Headland (Evans Headland)	From 8 am Easter Friday to 12 midnight on Easter Sunday in each of the years 2002-2006
Region 2 <i>That part of NSW lying generally between the parallel 29° 15' south latitude and the parallel 29° 45' south latitude</i>	Bluff Beach (Iluka) All beaches bounded by the southern breakwall of the Clarence River at Yamba, south to the vehicle access point at Pipi Beach, Yamba, with the exclusion of Convent Beach All beaches bounded by Angourie Point south to Rock Point (Entrance to Lake Arragan)	From 1 December each of the years 2002-2005, to 31 January in each succeeding year From 1 March in each of the years 2002-2005, to the last day in February in each succeeding year
Region 3 <i>That part of NSW lying generally between the parallel 29° 45' south latitude and the parallel 31° 44' south latitude</i>	Station Creek Beach (North of Red Rock) Main Beach (Nambucca Heads) Grassy Beach bounded by Grassy Head and Middle Head Smokey Cape- Lagers Point south to a point due west of Black Rocks (approx. 3000 m south of Smokey Cape) Town Beach (Port Macquarie) Flynn's Beach Shelley Beach Miners Beach Lighthouse Beach- That part from the southern extremity of Taking Point south to Watonga Rock Grants Beach (North Haven Beach)- That part from the northern breakwall to Camden Haven Inlet for a distance of 1000 m Hat Head Beach- that portion of Hat Head Beach for a distance of approx. 100 m from Korogoro Creek mouth north to pedestrian access No. 6	From 1 October in each of the years 2002-2005 to the last day in February in each succeeding year From 1 December in each of the years 2002-2005, to 31 January in each succeeding year Between official sunrise and sunset in the period from 15 December in each of the years 2002-2005 to 31 January in each succeeding year

Table 1 (cont.).

Region	Closed Beaches	Period of Closure
Region 4 <i>That part of NSW lying generally between the parallel 31° 44' south latitude and the parallel 33° 25' south latitude</i>	Main Beach (Forster) Pebbly Beach Boomerang Beach (Pacific Palms) Blueys Beach Koolgardie Beach All beaches bounded by Nobby's Head and the southern extremity of Dudley Beach Gravelly Beach Moonee Beach	From 1 March 2002 to 28 February 2005
Region 5 <i>That part of NSW lying generally between the parallel 33° 25' south latitude and the parallel 34° 20' south latitude</i>	Whale Beach Avalon Beach Bilgola Beach Bungan Beach Basin Beach Mona Vale Beach Warriewood Beach Turimetta Beach Narrabeen Beach Collaroy Beach Dee Why Beach Manly Beach All ocean beaches bounded by South Head to Cape Banks	From 1 November in each of the years 2002-2005 to the last day in February in each succeeding year
Region 6 <i>That part of NSW lying generally between the parallel 34° 20' south latitude and the parallel 35° 25' south latitude</i>	Coalcliff Beach Scarborough Beach Wombarra Beach Austinmer Beach Boyds Beach Grenfield Beach Culburra Beach All beaches bounded by the northern extremity of Cudmirrah Beach to the northern extremity of Monument Beach	From 1 March 2002 to 28 February
Region 7 <i>That part of NSW lying generally between the parallel 35° 25' south latitude and the border between the States of New South Wales and Victoria</i>	All beaches bounded by the southern extremity of Wimbie Beach and the northern extremity of Rosedale Beach All beaches bounded by Tanrandore Point south to Tuross Head All beaches bounded by Mummaga Head (Dalmeny) south to Duesburys Point All beaches bounded by the southern extremity of Kianga Beach at the entrance of Kianga Lake, to Glasshouse Rocks (Narooma) Armonds Bay Beach Bunga Beach bounded by Goallen Head and Bunga Head All beaches bounded by Bengunnu Point and the northern extremity of Picnic Beach Merimbula Beach-That part from the northern extremity of Merimbula Beach generally southerly for a distance of 200 m	From 1 March 2002 to 28 February 2005

Table 2. Additional Closures.

The following table includes additional section 8 or section 11 closures under the Regulation affecting ocean hauling operations

Method	Waters	Time	Period
By means of nets of every description, except the dip or scoop net and the landing net prescribed by Regulation	The whole of the waters of that part of Front Beach, Trial Bay, extending from the western most extremity of the beach generally easterly for 800 m	From 20 December to 31 January each year	For a period of five years from 21 January 2000
By means of nets of every description, except the dip or scoop net, hand hauled prawn net and the landing net prescribed by Regulation	Includes the waters of the South Pacific Ocean, south of a line drawn from the National Parks and Wildlife sign "Hat Head Beach" 119 degrees to the northern point of Little Nobby	Total	For a period of five years from 6 August 1999
By means of nets of every description	Waters of that part of the South Pacific Ocean adjacent to Airforce Beach, enclosed by a line drawn from the most northerly point of the northern breakwall, north to the vehicle access to the beach (approximately 100 m north of the Evans Head Surf Club)	From 1 November in each of the years 1997 to 2002, to 31 January in each succeeding year	From 1997 to 2002
All methods	All waters from mean high water mark of Cook Island to a boundary defined by five marker buoys (co-ordinates outlined in notification)	Total	From 2 July 1999
All methods	Jones Point, North Solitary Island, North Solitary Island, North West Rock, North West Solitary Island (sanctuary zones for each area)	From 7 January 2000 to official sunrise 1 July 2002	N/A
By means of nets of every description, except the dip or scoop net, hand hauled prawn net, push or scissors net, hoop or lift net and the landing net prescribed by Regulation	The whole of the waters of that part of Byron Bay, South Pacific Ocean, situated south-west of Cape Byron and known as Little Beach (or Wategos Beach)	During the period of 1 April to 30 June in each year	For five years from 29 October 1999
By means of nets of every description, except the landing net prescribed by Regulation	The whole of the waters of that part of the South Pacific Ocean adjoining Brooms Head Beach at Brooms Head extending out 183 m from the high-water mark between Cakora Point or Brooms Head and line being the north-easterly prolongation of the north-western boundary of the sub-division at Brooms Head	From 15 December to 15 January each ensuing year	For five years from 29 October 1999
By means of nets of every description, except the landing net, as prescribed by the Regulation	The whole of the waters enclosed by a line from the eastern extremity of the southern breakwater at Forster, generally southeast to a point on highwater mark adjacent to the northern end of Boundary Street, Forster. *Conditions for use of garfish net (south of Haydens Rock) outlined in notification	Total	For a period of five years from 30 October 1998

Table 2 (cont.)

Method	Waters	Time	Period
Nets of every description	Little Coogee Bay, Clovelly	Total	From 11 January 2002 to 10 January 2007
By means of all spears, spear guns and similar devices, and net of every description, except the dip or scoop net and landing net, as prescribed by the Regulation	Lord Howe Island. The whole of the waters of the western side of Lord Howe Island between the coral reef and the mainland of the said island and being the waters known as the Lagoon, including the bays, inlets and creeks of the said lagoon	Total	For a period of five years from 23 March 2001
Nets of every description, other than by certain recreational nets	Certain waters of Port Hacking (Hungry Pt to Bass & Flinders)	6am on Saturday to 6am on Monday and from 6 am to 6pm on any weekday or public holiday	For a period of five years from 17 September 1999
General purpose haul nets	Sydney Harbour entrance waters	From noon on Saturday of each week to 8 am Monday and public holidays	For a period of five years from 11 December 1998
All nets except a landing net as prescribed in the Regulation	Shell Harbour (for that area extending into ocean waters)	Total	For a period of five years from 6 August 1999
All nets except a landing net as prescribed in the Regulation	Port Kembla and Outer Harbour	Total	For a period of five years from 13 August 1999
All nets except a landing net as prescribed in the Regulation	Merimbula and Tathra Platforms	Total	For a period of five years from 10 December 1999
Purse seine nets	Black Road Bait Ground (North Narrabeen)	Total	For a period of five years from 9 June 2000

Table 3. General additional closures affecting the Ocean Hauling Fishery.

The following table includes general Section 8 or Section 11 closures under the Regulation that may affect ocean hauling operations

Closure	Period
Taking of invertebrates from Intertidal Protected Areas	From 1 January 2002 to 31 December 2003
All commercial fishing without holding an endorsement	Continuous from 21 July 2000
Shark finning	Continuous from 4 June 1999
The taking of great white sharks	Continuous from 24 January 1997
Commercial fishing from boats in offshore waters without appropriate endorsements	For a period of 5 years from 8 October 1999
Powered fishing vessel restriction	For a period of 5 years from 28 February 2002
Taking Australian salmon and tailor by nets	For a period of 5 years from midnight 31 August 2001

Regional liaison process closures.

The following areas of beach are closed as a result of implementation of the outcomes of the regional liaison process.

Norries Headland Beach - from Norries Headland to 400m north

Golden Beach - between Gloria Street and North Head Road

Brunswick River - 1000m either side of the mouth of the Brunswick River

Watego's Beach - between Fisherman's Lookout and Cape Byron

Little Watego's Beach - between Fishermen's Lookout and Cape Byron

Broken Head - between Cocked Hat Rock to Jews Point

Boulder Beach - south of Byron St Lennox Head boat ramp to Whites Head

Shelly Beach - between Black Head and Ballina Head

Airforce Beach - 402 metres north from the breakwall at Evans Head

Part Woody Bay - 250m west from Woody Head

Turners Beach (Yamba) - between Clarence Head and the southern wall of the Clarence River

Yamba Beach - from Clarence Head to rock outcrop north of Convent Beach

All beaches bounded by Angourie Bay south to Rocky Point (entrance to Lake Arragan)

Corindi - 1 km south of Corindi River (from Red Rock)

Corindi Beach - between 1km north and 2km north of Arrawarra Headland

Mullaway Beach - between Ocean View Headland and Mullaway Headland

All beaches bounded by Green Bluff and Diggers Head

Park Beach - between Little Muttonbird Island to Macauleys Headland

Hungry Head - 1km south from the southern training wall of the Bellingen River

Nambucca Heads - from the southern end of Shelly Beach (Cliffy Point) to the northern end of Beilbys Beach

Forster Beach - south of the mouth of the Nambucca River for 1km

Grassy Beach - from Grassy Head to Scotts Head

Smoky Cape - from Laggars Point to 3km south of Smoky Cape

Hungry Hill - from Korogoro Point to 3km south of the Jew Bite

Crescent Head - 1km north from Crescent Head

North Shore Beach - from Point Plomer to a point 3.5km north of the wall at Pelican Point.

All beaches bounded by the southern wall of Port Macquarie and Middle Rock Point

Grants Beach - from the northern wall of Camden Haven Inlet to 1km north

All beaches between Crowdy Head south to Wallabi Point

Shelly Beach - between Red Head and Diamond Beach

All beaches between the Wallis Lake entrance to the northern end of Seven Mile Beach

Boomerang Beach - entire beach

Blueys Beach - entire beach

Treachery Beach - entire beach

Bennetts Beach - 500m north and 500m south of Bennetts Beach surf club

Fingal Beach - between Fingal Beach Surf Club and 1km north along the beach.

Stockton Beach – from the sewage treatment works north to 500m north of the Signa shipwreck

Newcastle - all beaches bounded by Nobbys Head to Waste Water Treatment Works at Belmont

Moonee Beach - Deep Cave Bay – north of Flat Rocks Point or Island

Frazer Beach - Snapper Point to Wybung Head

Pebbley Beach - between Soliders Point and Norah Head

Pebby Beach (Murramarang) - entire beach

All beaches between southern extremity of Wimbie to the northern extremity of Rosedale Beach

Bengello Beach - for 500m north of Moruya Breakwall

All beaches bounded by Tarandore Point to Tuross Head

Wilson Hall Beach - for 300m on both sides of the first set of rocks south of the Lake Brou opening

All beaches bounded by Boat Harbour Point and the southern extremity of Corunna Point (Mystery Bay)

All beaches bounded by Mummaga Head (Dalmeny) south to Glasshouse Rocks (with the exception of Kianga Beach only from 1 May to 30 June each year)

All beaches bounded by Blue Point and Breakaway Beach

All beaches from the northern extremity of Armond Bay Beach to Murrah Head

All beaches bounded by Goalen Head and Bunga Head

All beaches bounded by Bengunnu Point and the northern extremity of Picnic Beach

Merimbula Beach - from the northern end south for 500m

Appendix 3 The most prominent species in the Ocean Hauling Fishery

This section provides an overview of selected target species, which constitute in excess of 90% of the total landed weight taken in the Ocean Hauling Fishery. The following descriptions of each of these species includes four graphs showing catch trends, seasonal trends, catch between other commercial fisheries and the main gear types used in harvesting each of these species.

The information in the following section has been extracted from a variety of sources including Kailola *et al.* (1993), Yearsley *et al.* (1999), Pease and Grinberg (1995), Fletcher and McVea (2000), and the NSW Fisheries Catch Statistics Database.

For a full description of the species and historic catch and effort trends, refer to NSW Fisheries' *1998/99 Status of Fisheries Resources* by Fletcher and McVea (2000), which can be found on the NSW Fisheries website: www.fisheries.nsw.gov.au.

Information relating to prices for the species was obtained from Sydney Fish Market records, and other marketing information was obtained from fish wholesalers or exporters in NSW.

Sea mullet (*Mugil cephalus*)

The following overview is based on information provided in SPCC (1981), Kailola *et al.* (1993), Pollard and Grown (1993), Pease and Grinberg (1995), Virgona *et al.* (1998) Gibbs (1997), Yearsley *et al.* (1999), Fletcher and McVea (2000), and the NSW Fisheries catch statistics database.

The sea, bully or striped mullet (*Mugil cephalus*) occurs around much of the Australian coastline, as well as in many temperate and subtropical areas worldwide. In NSW Waters, sea mullet are found primarily within estuaries and inshore waters, although they also occur within the freshwater reaches of coastal rivers. Within estuaries, sea mullet are found in association with shallow weed beds and bare substrates. They mostly eat microscopic plants (e.g. blue-green algae, filamentous green algae and diatoms), macroalgae (e.g. the green sea lettuce *Ulva lactuca*) and detritus, and often ingest large amounts of substrate in the process.

Spawning occurs in surface waters at sea, typically during autumn to early winter. The larvae enter estuaries and the small juveniles subsequently live in sheltered shallow water habitats. Many sea mullet travel into freshwaters, where they may reside for long periods, particularly if denied passage back to the estuary. Sea mullet grow quite quickly, taking about four years to reach 440 mm in length. Maximum length is approximately 750 mm. Between late summer and early winter, adult sea mullet (two or more years of age) leave estuaries in large schools that then travel northward along the open coastline on their way to spawning grounds. This behaviour appears to be triggered by strong westerly winds and falling water temperatures. Shorter migrations by so-called 'hard-gut' (sub-adult) also occur periodically, possibly in response to heavy flooding and consequent loss of food resources.

Sea mullet are targeted in the Ocean Hauling Fishery during the annual pre-spawning run. Fish travelling in large aggregations can result in large catches from single hauls on ocean beaches. Migrations commence earlier on the south coast than on the north coast of NSW. Hence, the beach haul fishery for sea mullet commences and finishes earlier on the south coast each year. The stock is shared with the sea mullet fishery in southern Queensland.

Pre-spawning females are mainly sold directly to processors, where the roe is extracted and exported to South-East Asia. Males are sold through the Sydney Fish Market or sold direct to processors. Some males are exported whole by processors to the Middle East. Males and females are sold locally for human consumption and for bait.

When sold as whole fish through the Sydney Fish Market, sea mullet attracted an average wholesale price of \$1.78/kg for the period 1995/96 to 1999/2000. Females with a high roe content (10-12% of body weight) attract the highest prices. In 1997/98 and 1998/99, processors paid \$2.50 to \$3.50/kg for females caught between April and July.

Annual landings progressively increased after 1984/85 and peaked at 5,560 t in 1993/94. Landings remained relatively high, between 4,000 and 5,000 t, until 1997/98. These trends reflected an increase in ocean landings, which occurred in response to the development of an export market for roe. Throughout this period, estuary landings were relatively stable. After 1997/98, landings declined significantly. This decline has been most dramatic in the ocean fishery, but estuary landings have also declined slightly. The recent decline in landings almost certainly reflects a decrease in abundance of stock, although the cause is unclear. The decline in abundance may be an effect of over harvesting by the ocean fishery, but could also be a natural fluctuation due to recruitment variability.

Sea mullet (*Mugil cephalus*)

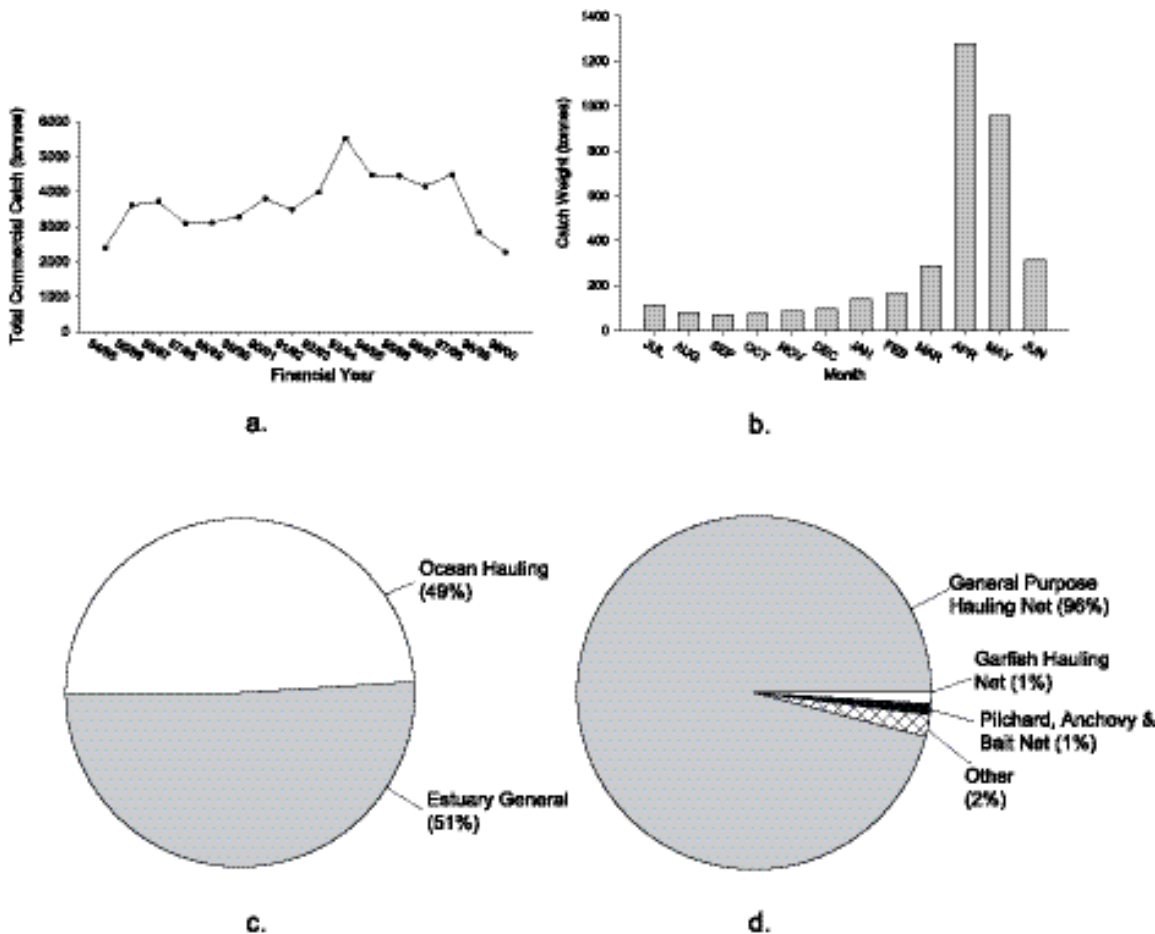


Figure 1a. The total reported commercial catch of sea mullet in NSW for the period of 1984/85 to 1999/2000.

Figure 1b. The average reported catch per month of sea mullet in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 1c. The average percentage of reported catch of sea mullet between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 1d. The average percentage of reported catch of sea mullet by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Australian salmon (*Arripis trutta*)

Eastern Australian salmon occur in continental shelf waters and in estuaries of NSW, Victoria and Tasmania. Juveniles occur in sheltered coastal waters and estuaries. Fish mature at approximately four years old and 39 cm fork length.

Australian salmon are primarily caught by haul nets in the Ocean Hauling Fishery, although small quantities are also caught by purse seining. Catches occur throughout the year. Highest annual landings have tended to occur south of Sydney.

Australian salmon have historically been targeted on the far south coast of NSW, where fish aggregate at various times of year. Fish aggregate to spawn in coastal waters between Lakes Entrance and Bermagui, from November to February. Spawning occurs in the surf zone. Fish disperse north and south after spawning. Some fish also appear to aggregate on the far south coast during winter. Fishers believe that these 'over-wintering' fish migrate northward from Victoria and Tasmania during autumn. Historically, highest catches in June on the south coast may reflect this behaviour.

More recently, since 1995, highest catches on the south coast have been in April-May and in October. This suggests that south coast fishers target fish as they migrate to i) over-wintering locations and ii) spawning locations. Since the mid-1990s, some relatively high catches have also been taken in central and northern NSW (particularly zones 4 and 5) from August to December.

In August 2001, ocean waters north of Barrenjoey Headland were closed to the commercial targeting of Australian salmon in nets. A bycatch of 100 kg of Australian salmon per person per day is in place for northern NSW waters, while the species may still be taken by net fishing south of Barrenjoey Headland. Australian salmon are predators of several important target species in the Ocean Hauling Fishery, including sea garfish and pilchards. Consequently, Australian salmon are sometimes caught when targeting these species.

When sold as whole fish through the Sydney Fish Market, Australian salmon attracted an average wholesale price of \$0.97/kg for the period 1995/96 to 1999/2000. The market for Australian salmon was reduced after the closure of a south coast cannery (processing factory) in 1999. Relatively low landings in recent years probably result from reduced targeting by fishers due to a limited market, rather than a decrease in stock abundance.

NSW fishers target the same genetic stock as occurs in, and is targeted in, Victoria and Tasmania. In Victoria and Tasmania, there is an overlap in distribution between eastern and western Australian salmon – these are similar species in the same family. Australian salmon caught on the west Australian coast are the western species (*Arripis truttaceus*), which is not caught in NSW.

Australian salmon (*Arripis trutta*)

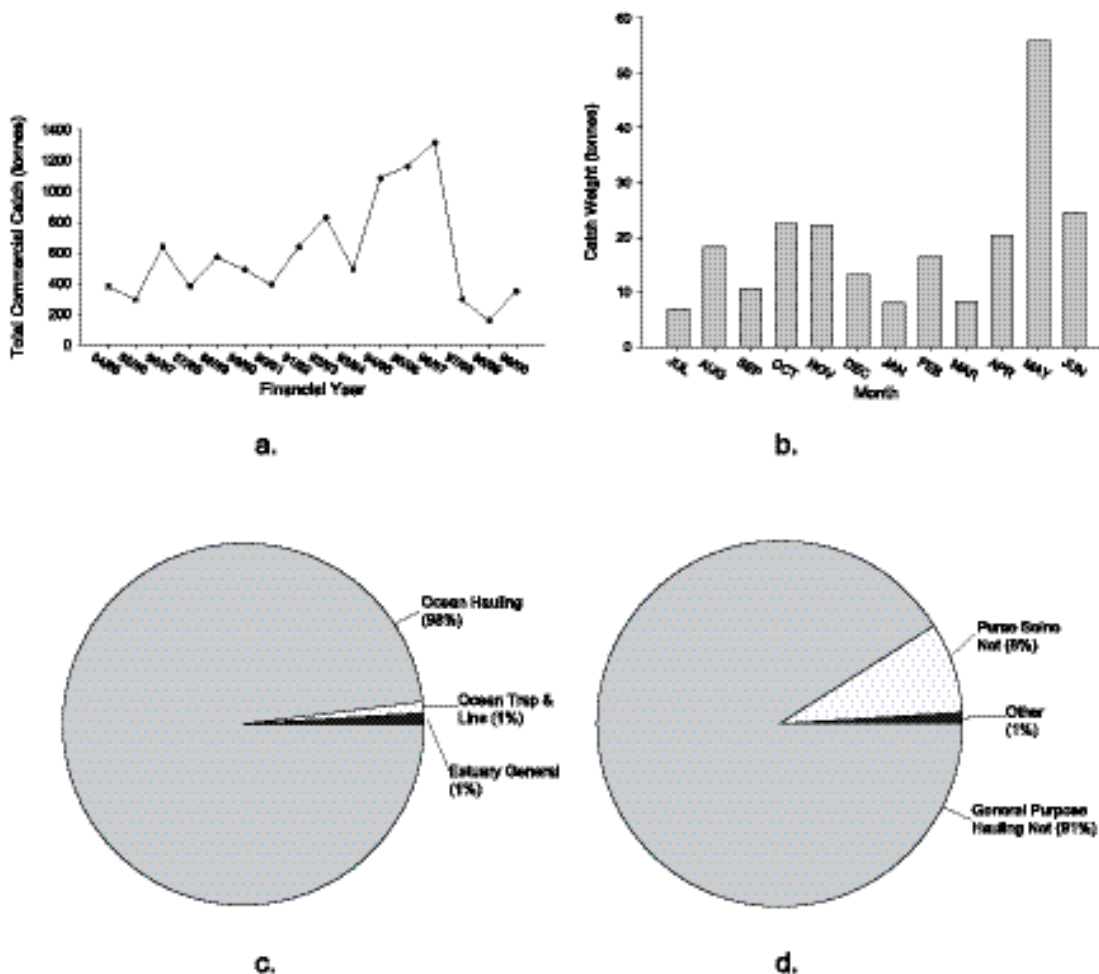


Figure 2a. The total reported commercial catch of Australian salmon in NSW for the period of 1984/85 to 1999/2000.

Figure 2b. The average reported catch per month of Australian salmon in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 2c. The average percentage of reported catch of Australian salmon between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 2d. The average percentage of reported catch of Australian salmon by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Yellowfin bream (*Acanthopagrus australis*)

The following overview is based on information provided in Pease *et al.* (1981c), Kailola *et al.* (1993), Pollard and Growns (1993), Pease and Grinberg (1995), Gibbs (1997), Yearsley *et al.* (1999), Fletcher and McVea (2000), Gray *et al.* (2000) and the NSW Fisheries catch statistics database.

The yellowfin bream (*Acanthopagrus australis*) is endemic to Australia and occurs from Townsville in Queensland to the Gippsland lakes in Victoria. In NSW Waters, yellowfin bream are found primarily within estuaries and along nearshore beaches and rocky reefs, although they also occur within the lower freshwater reaches of coastal rivers. Within estuaries, yellowfin bream are found in association with all types of habitat, including seagrass beds, mangroves, bare substrates and rocky reefs. They eat a wide variety of foods, including small fish, molluscs, crustaceans and worms.

Spawning occurs in surf zones near estuary entrances, typically during winter. The larvae enter estuaries and the small juveniles subsequently live in sheltered shallow water habitats (particularly seagrass beds and mangrove channels). Larger juveniles occur in slightly deeper waters, and are particularly common around estuarine reefs. Yellowfin bream grow slowly, taking about five years to reach 230 mm (fork length). They mature at around 220 mm and appear to undertake extensive pre-spawning migrations. Maximum length is about 660 mm (total length). Adults usually return to estuarine waters after spawning.

The majority of bream taken in the Ocean Hauling Fishery are caught in general purpose hauling nets. The highest commercial catches of bream occur in autumn and winter. Yellowfin bream are also taken in large quantities by recreational fishers.

Reported landings of bream have declined over the past seven years. Reductions in the past three years may be partly attributed to phasing out of the use of pound nets in Port Stephens and adjoining coastal waters but could also be attributable to general declines in reported estuarine fishing effort. Declines in landings could also be attributed to environmental conditions and the availability of fish in the Ocean Hauling Fishery. Despite the recent reductions in reported landings, the age compositions of catches have remained relatively stable, indicating no declines in older fish. The absence of a reliable index of stock abundance casts much uncertainty over the status of the bream stock.

Bream are a popular table fish with the majority sold fresh on the domestic market. When sold as whole fish through the Sydney Fish Market, bream attracted an average wholesale price of \$8.68/kg for the period 1995/96 to 1999/2000. Yellowfin bream should not be confused with morwong, which are often sold under the marketing name of 'bream' or 'sea bream'.

Black bream are a similar species to yellowfin bream and are found in estuarine waters on the NSW coast south of Myall Lakes. They are almost exclusively found in estuarine waters, and generally only enter ocean waters after periods of flood. Black bream are often reported as yellowfin bream during catch reporting as distinguishing the difference between the species by visual examination can be very difficult. The differentiation between the species is made more difficult through a percentage of hybrids that exist as a result of the two species interbreeding. Black bream only constitute a small component (less than 5%) of overall estuarine bream catches.

The species of black and yellowfin bream are required to be recorded under the same species on monthly catch returns. The presence of black bream in ocean hauling landings is very rare and landings of black bream by ocean hauling fishers are considered to be nil.

Yellowfin bream (*Acanthopagrus australis*)

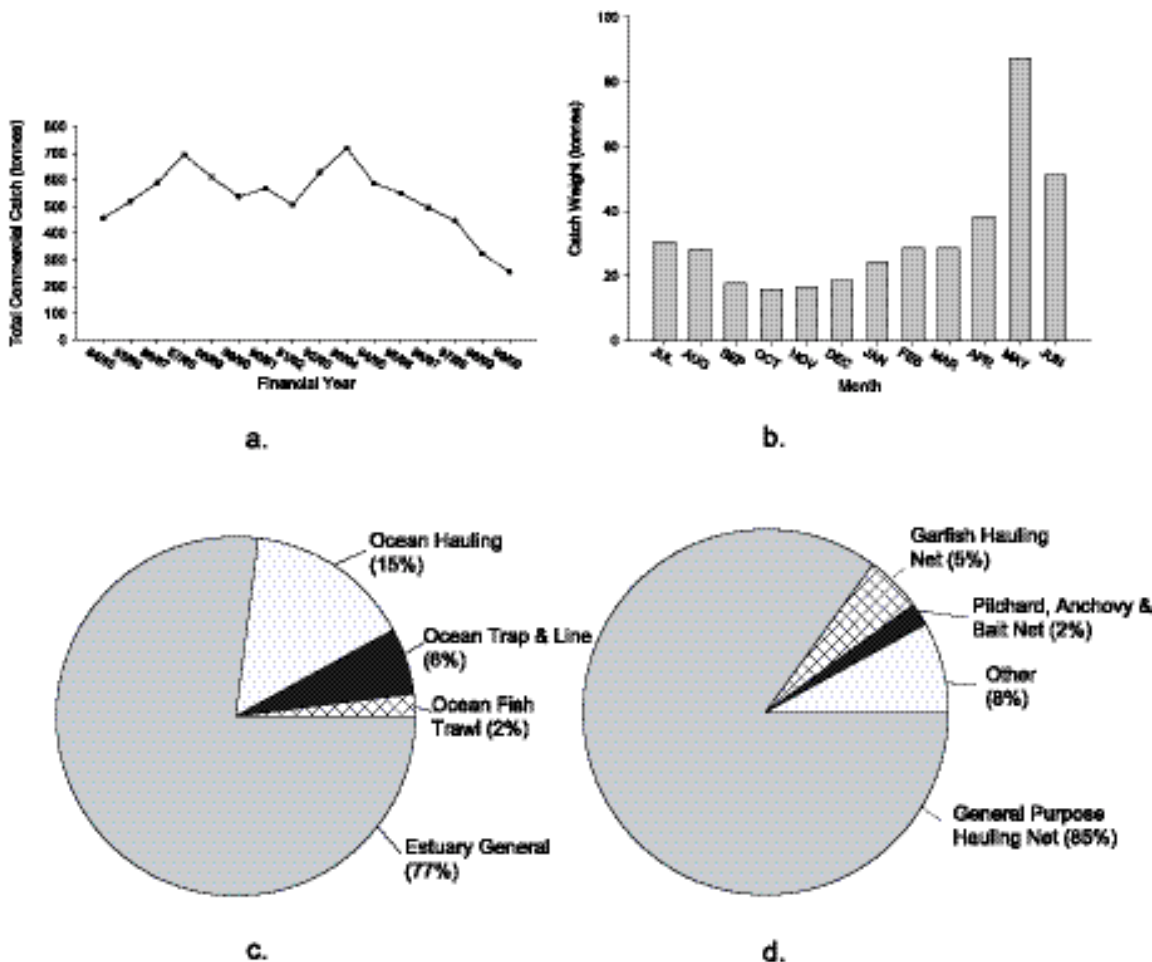


Figure 3a. The total reported commercial catch of bream (black and yellowfin) in NSW for the period of 1984/85 to 1999/2000.

Figure 3b. The average reported catch per month of bream (black and yellowfin) in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 3c. The average percentage of reported catch of bream (black and yellowfin) between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 3d. The average percentage of reported catch of bream (black and yellowfin) by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Sea garfish (*Hyporhamphus australis*)

Sea garfish are found in ocean waters of Queensland, NSW and Victoria, and also Lord Howe and Norfolk Islands. They are also found in the lower reaches of estuaries. The life history is poorly understood. Juveniles are known to occur in estuaries and spawning most likely occurs in coastal waters.

In NSW, virtually all sea garfish are caught by the Ocean Hauling Fishery during summer and autumn. Most catches are in hauling nets, with small quantities caught in bullringing nets.

Historically, the largest catches have been made by boat-based hauling to the south of Sydney, while smaller catches from beach-based hauling occurred to the north. In recent years, northern landings (particularly around Port Stephens) have increased due to an increase in boat-based activities. Boats are a more efficient method by which to target garfish.

In general, marked increases in annual landings of sea garfish were associated with the development of an export market to Japan during the early 1990s. A significant decline in NSW landings since the mid-1990s has prompted concerns that this stock is overfished. Sea garfish catch-per-unit-effort by beach and boat-based fishers decreased over this period, strongly suggesting a decline in stock abundance.

When sold as whole fish through the Sydney Fish Market, sea garfish attracted an average wholesale price of \$4.06/kg for the period 1995/96 to 1999/2000. The highest returns are attained for garfish that are sold directly to processors for export. Only large fish are exported. Large and medium sized fish are sold for local consumption, and small fish are also used locally for bait.

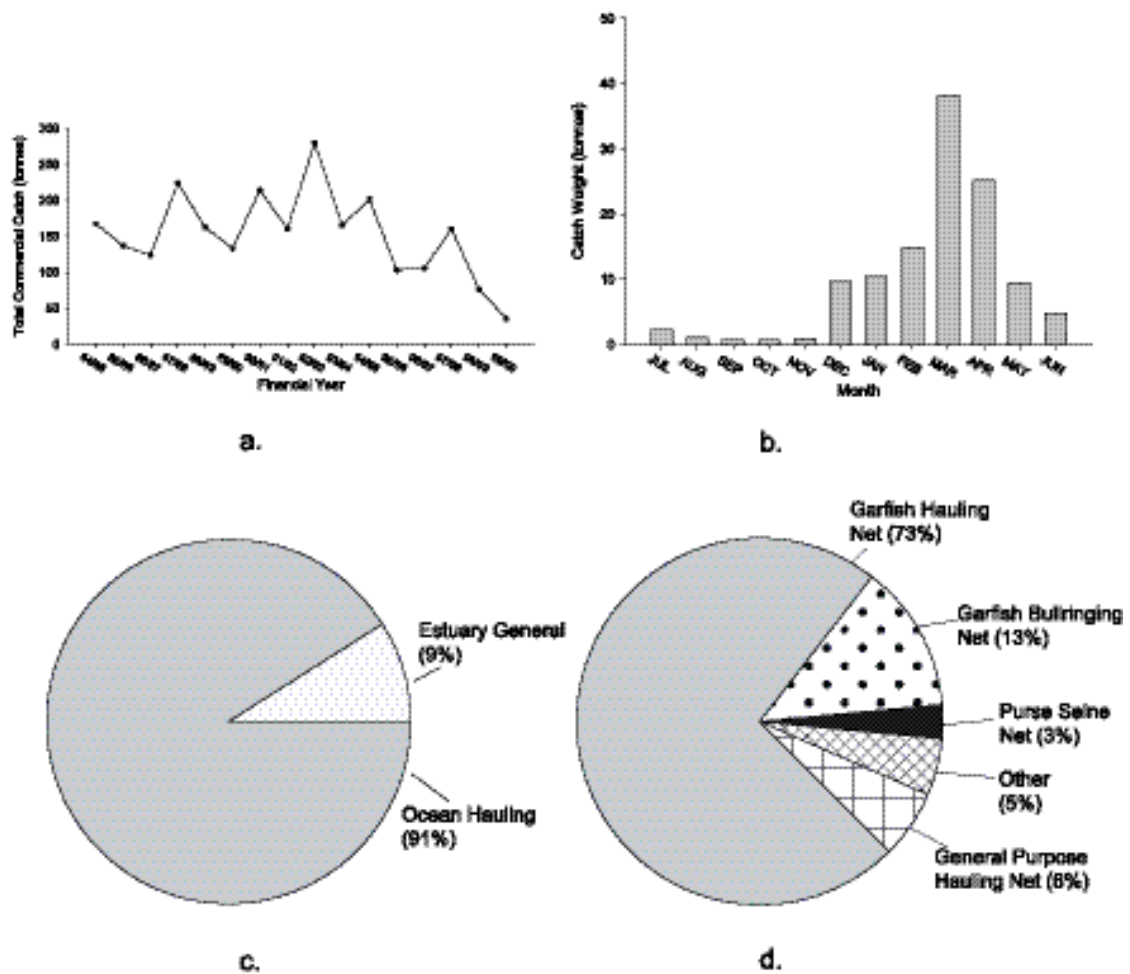
Sea garfish (*Hyporhamphus australis*)

Figure 4a. The total reported commercial catch of sea garfish in NSW for the period of 1984/85 to 1999/2000.

Figure 4b. The average reported catch per month of sea garfish in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 4c. The average percentage of reported catch of sea garfish between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 4d. The average percentage of reported catch of sea garfish by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Luderick (*Girella tricuspidata*)

The following overview is based on information provided in Pease *et al.* (1981c), Kailola *et al.* (1993), Pollard and Growns (1993), Pease and Grinberg (1995), Gibbs (1997), Yearsley *et al.* (1999), Fletcher and McVea (2000), and the NSW Fisheries catch statistics database.

The luderick (*Girella tricuspidata*) occurs from Noosa in Queensland to Tasmania and South Australia and is also found in New Zealand. In NSW Waters, luderick are found primarily within estuaries and around nearshore rocky reefs. Within estuaries, luderick are mainly found in association with 'weedy' habitats such as seagrass beds and rocky reefs. They are primarily herbivorous, preferring certain species of green macroalgae; although other foods (particularly small invertebrates) also form part of their diet.

Spawning occurs in surf zones near estuary entrances, typically during winter. The larvae enter estuaries and the small juveniles subsequently live in sheltered shallow water habitats (particularly seagrass beds and mangrove channels). Larger juveniles occur in slightly deeper waters, and are particularly common around estuarine reefs. Luderick grow fairly slowly, taking approximately five years to reach 270 mm (fork length). They mature at around 250 mm and undertake a northerly migration along the NSW coast prior to spawning. Maximum length is approximately 700 mm (total length). Adults usually return to estuarine waters after spawning.

Luderick taken in the Ocean Hauling Fishery are caught in general purpose hauling nets. The highest commercial catches of luderick occur in autumn and winter.

When sold as whole fish through the Sydney Fish Market, luderick attracted an average wholesale price of \$1.42/kg for the period 1995/96 to 1999/2000. A higher price is generally obtained in the Melbourne Fish Market, so many fishers on the south coast send luderick to markets in Melbourne rather than Sydney. A proportion of luderick is salted and used for bait in the commercial rock lobster fishery, although estimates are not recorded.

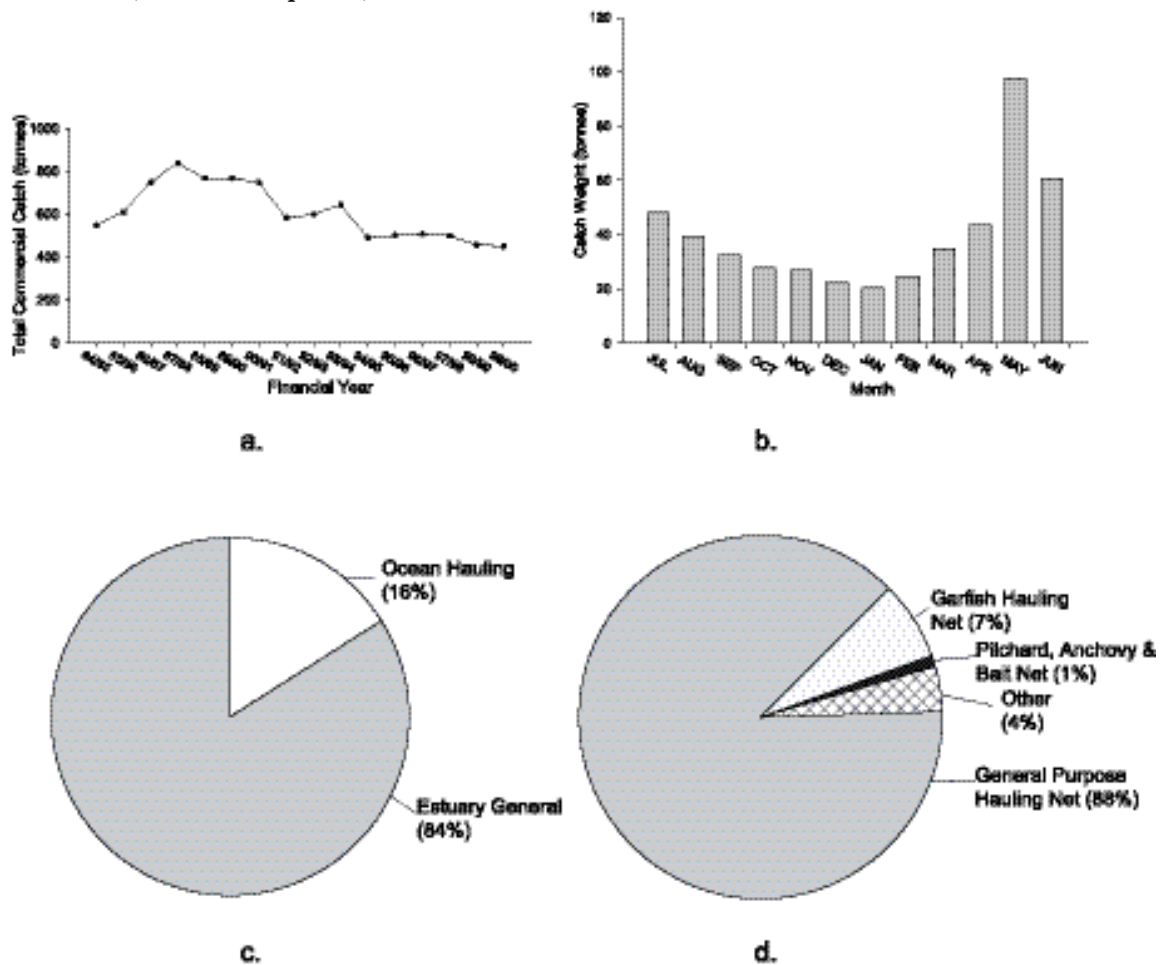
Luderick (*Girella tricuspidata*)

Figure 5a. The total reported commercial catch of luderick in NSW for the period of 1984/85 to 1999/2000.

Figure 5b. The average reported catch per month of luderick in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 5c. The average percentage of reported catch of luderick between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 5d. The average percentage of reported catch of luderick by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Sand whiting (*Sillago ciliata*)

The following overview is based on information provided in Pease *et al.* (1981b), Hutchins and Swainston (1986), Kailola *et al.* (1993), Pollard and Growns (1993), West (1993) Pease and Grinberg (1995), Gibbs (1997), Yearsley *et al.* (1999), Fletcher and McVea (2000), and the NSW Fisheries catch statistics database.

The sand whiting (*Sillago ciliata*) occurs along the entire eastern coastline of Australia, from Cape York (Queensland) down to eastern Tasmania. It is also found in New Caledonia and Papua New Guinea. In NSW waters, sand whiting are found within estuaries and in coastal waters off ocean beaches. Within estuaries, the favoured habitat is bare sandy substrate. Sand whiting eat bottom-dwelling invertebrates, particularly polychaete worms, crustaceans and molluscs taken by fossicking through the sand.

Spawning occurs near river mouths, typically during summer. Many of the larvae enter estuaries, with the small juveniles preferring shallow water (particularly along sandy shores, but also in and around seagrasses and mangroves). Sand whiting grow fairly slowly, taking about five years to reach 290 mm (fork length). They mature at around 240 mm (males) to 260 mm (females). Maximum length is about 500 mm (total length). After spawning, adults may either enter estuarine waters or remain along ocean beaches.

Sand whiting are caught by ocean haul fishers when they move out of estuaries to spawn at estuary mouths and in surf zones. Catches by Ocean Hauling Fishery are low relatively to catches by estuary general fishers.

The majority of sand whiting taken by the Ocean Hauling Fishery are caught in general purpose hauling nets throughout the year but catches are higher in summer and autumn. When sold as whole fish through the Sydney Fish Market, sand whiting attracted an average wholesale price of \$9.27/kg for the period 1995/96 to 1999/2000.

The average total catch of sand whiting in the Ocean Hauling Fishery for the years 1997/98 and 1998/99, was 8,231 kg.

Sand whiting (*Sillago ciliata*)

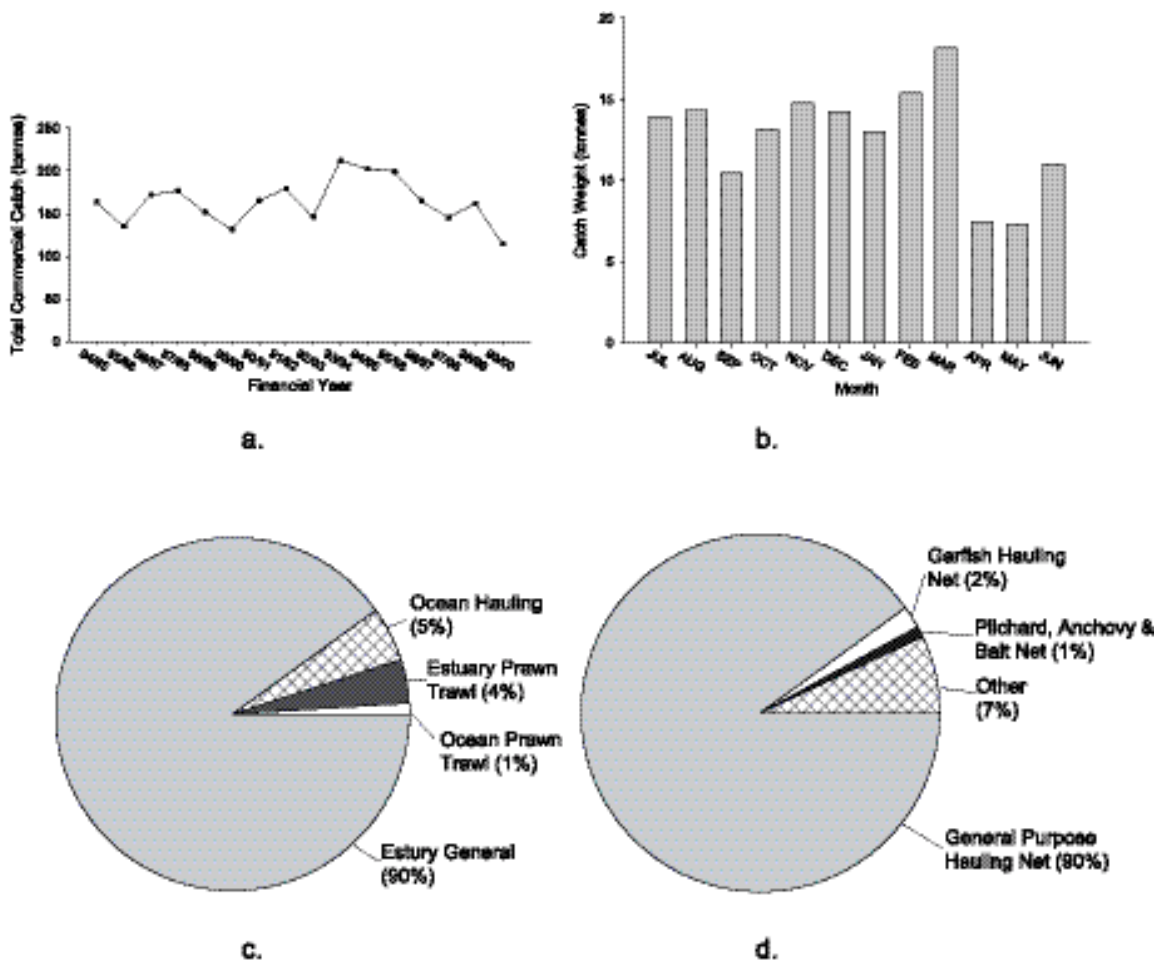


Figure 6a. The total reported commercial catch of sand whiting in NSW for the period of 1984/85 to 1999/2000.

Figure 6b. The average reported catch per month of sand whiting in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 6c. The average percentage of reported catch of sand whiting between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 6d. The average percentage of reported catch of sand whiting by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Pilchards (*Sardinops neopilchardus*)

Pilchards occur in many temperate regions of the world, including all states of Australia except the Northern Territory. Pilchards inhabit continental shelf waters and the lower reaches of estuaries. Spawning occurs in summer and autumn in NSW waters. Fish mature at one to three years old and 7-13 cm fork length.

Pilchards are mainly caught by the Ocean Hauling Fishery in purse seine nets and bait nets (which are modified hauling nets). Catches of pilchards by lift nets for bait were 4,570kg in the 1999/2000 financial year. Smaller quantities are also taken in general purpose hauling nets. Highest catches occur in winter and spring in this fishery, although some catches are taken throughout the year.

Mass mortality of pilchards occurred in 1995 and 1998 throughout Western Australia, South Australia, Victoria and NSW, apparently caused by a herpes virus. Closures were put in place during these periods preventing commercial catches of pilchards, contributing to the lower level of catch taken in these years. Very low annual landings since these events suggest that stock levels are yet to recover.

Pilchards are sold for bait, pet food and for human consumption, either canned or fresh. Pilchards are an important prey item for many fish, including other target species in the Ocean Hauling Fishery. When sold as whole fish through the Sydney Fish Market, pilchards attracted an average wholesale price of \$2.46 per kilogram for the period 1995/96 to 1999/2000.

The average total catch of pilchards in the fishery for the years 1997/98 and 1998/99, was 239, 639 kg.

Pilchards (*Sardinops neopilchardus*)

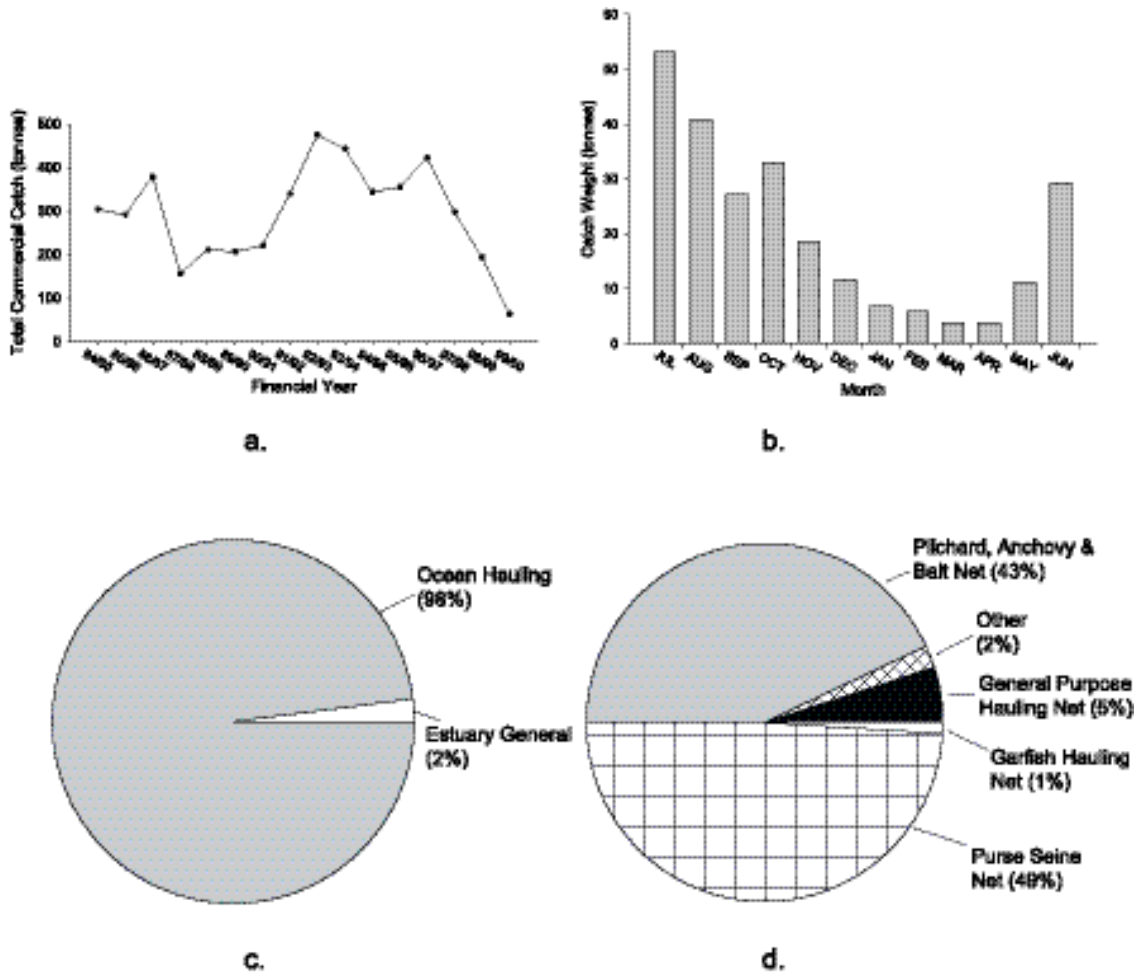


Figure 7a. The total reported commercial catch of pilchards in NSW for the period of 1984/85 to 1999/2000.

Figure 7b. The average reported catch per month of pilchards in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 7c. The average percentage of reported catch of pilchards between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 7d. The average percentage of reported catch of pilchards by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Yellowtail (*Trachurus novaezelandiae*)

Yellowtail occur in all States of Australia except the Northern Territory. The species inhabits coastal waters and the lower reaches of estuaries. Adults are associated with rocky reefs, while juveniles occur over shallow, soft substrate. Spawning occurs in summer and autumn in NSW waters. Fish mature at approximately three years old and 20-22 cm fork length.

Yellowtail are relative long lived, reaching 28 years in New Zealand, and at least 15 years in NSW. The Ocean Hauling Fishery may exploit relatively young fish. Fish from the NSW stock also occur offshore, beyond state waters, and may be targeted by Commonwealth licensed purse seine fishers.

Yellowtail are mainly caught by the Ocean Hauling Fishery in purse seine nets. Smaller quantities are also taken in bait nets (which are modified hauling nets) and general purpose hauling nets. Catches are taken throughout the year, with slightly higher catches in summer and autumn. Catches of yellowtail by lifts net for bait were 14,011 kg and 18,738 kg in 1997/1998 and 1998/1999, respectively.

The trend of increasing catches is probably a result of a growing demand for the yellowtail for use as bait in other commercial and recreational fishing activities, predominantly fishing for tuna. The trend may also partly reflect recent improvements in the reporting of baitfish landings. Bait caught for own use may not have been fully reported in earlier years.

Most yellowtail are sold for human consumption or for bait. When sold as whole fish through the Sydney Fish Market, yellowtail attracted an average wholesale price of \$1.43 / kilogram for the period 1995/96 to 1999/2000.

Yellowtail (*Trachurus novaezelandiae*)

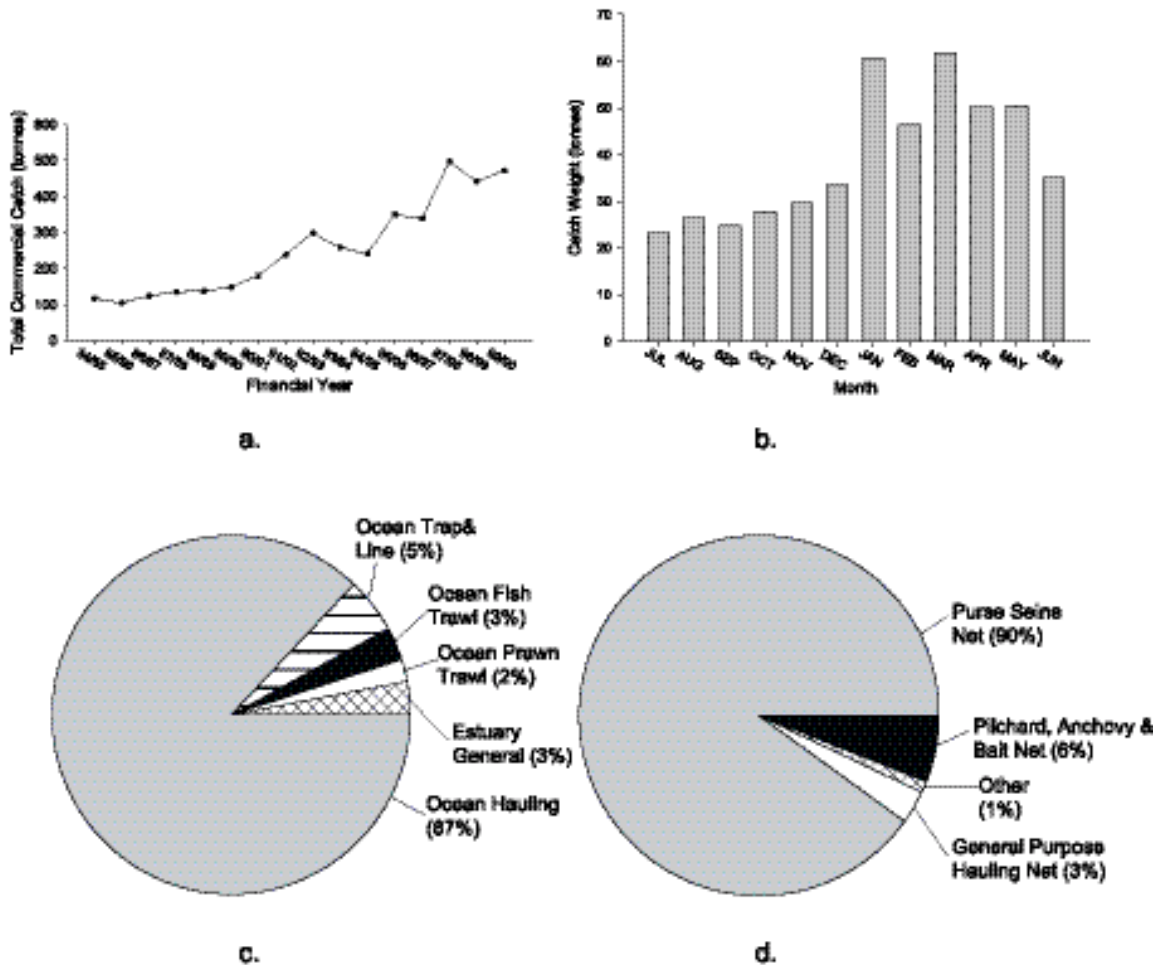


Figure 8a. The total reported commercial catch of yellowtail in NSW for the period of 1984/85 to 1999/2000.

Figure 8b. The average reported catch per month of yellowtail in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 8c. The average percentage of reported catch of yellowtail between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 8d. The average percentage of reported catch of yellowtail by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Blue mackerel (*Scomber australasicus*)

Blue mackerel occur in all states of Australia except the Northern Territory. The species inhabits estuarine and continental shelf waters, with older fish occurring further offshore. Spawning occurs in summer. The life history is poorly understood.

Blue mackerel grow relatively quickly, reaching approximately 25 cm after one year. The Ocean Hauling Fishery exploits relatively young fish. The oldest fish from the NSW stock occur offshore, beyond state waters, and are probably targeted by Commonwealth licensed purse seine fishers.

Blue mackerel are mainly caught by the Ocean Hauling Fishery in purse seine nets. Smaller quantities are also taken in bait nets (which are modified hauling nets) and general purpose hauling nets. Similar catch levels occur in all months of the year. Catches of blue mackerel by lift nets for bait were 10,926 kg and 9,833 kg in 1997/1998 and 1998/1999 (respectively).

The long term catch trend for blue mackerel is stable, although considerable fluctuations have occurred. These fluctuations are likely to reflect changes in stock availability due to recruitment variability, and may also reflect changes in the distribution of fish due to oceanographic factors.

Most blue mackerel are sold for human consumption or for bait. When sold as whole fish through the Sydney Fish Market, blue mackerel attracted an average wholesale price of \$1.44 per kilogram for the period 1995/96 to 1999/2000.

Blue mackerel (*Scomber australasicus*)

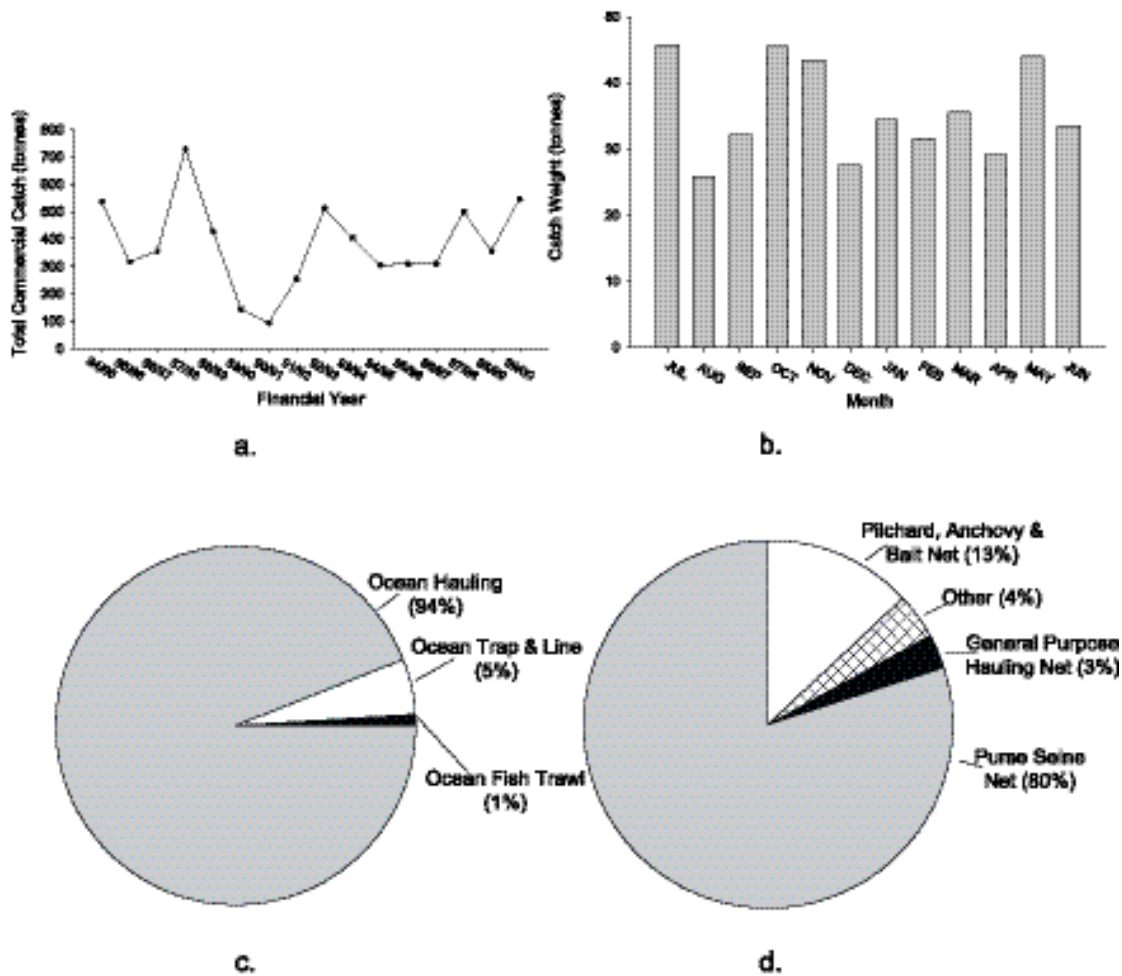


Figure 9a. The total reported commercial catch of blue mackerel in NSW for the period of 1984/85 to 1999/2000.

Figure 9b. The average reported catch per month of blue mackerel in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 9c. The average percentage of reported catch of blue mackerel between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 9d. The average percentage of reported catch of blue mackerel by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Sweep (*Scorpius lineolatus*)

Silver sweep are most abundant in NSW waters but also occur in southern Queensland, Victoria and Tasmania. Adults and juveniles are associated with coastal and estuarine reefs. The biology of this species is poorly understood. Spawning times and locations are unknown. The age and size at maturity is also unknown. Sweep are relatively long-lived and may reach a maximum age over 40 years (D. Ferrell, NSW Fisheries, unpubl. data). Preliminary evidence suggests that the average age of sweep caught by recreational fishers is approximately 25 years. The longevity and slow growth of this species may make it particularly vulnerable to over-harvesting.

In NSW, approximately two thirds of sweep commercial landings are by fish traps within the Ocean Trap and Line Fishery, with the remaining catch taken by purse seine nets within the Ocean Hauling Fishery. Trap landings are highest during spring and summer months, whereas purse seine landings tend to be higher during autumn.

Between 1990/91 and 1992/93, reported landings of this species increased from about 70 t to 150 t. Peak landings of 157 t occurred in 1995/96. Between 1997/98 and 1999/2000, reported landings declined rapidly from 143 t to 48 t. Preliminary data suggests that this decline continued in 2000/01, with unverified commercial landings of approximately 27 t. Such significant fluctuations in landings are of concern, given the minimal information regarding stock structure and general life history that is available for this species.

When sold as whole fish through the Sydney Fish Market, sweep attracted an average wholesale price of \$1.91/kg for the period 1995/96 to 1999/2000. Price increased steadily over this period and averaged \$2.71 in 1999/00. Sweep is a relatively new product for human consumption in NSW, and price is expected to continue to increase as markets develop.

Other species of sweep, which are common to the north and south of NSW but also occasionally occur within NSW, may form part of commercial sweep landings in NSW. However, the extent to which this occurs is unclear.

The average total catch of sweep in the fishery for the years 1997/98 and 1998/99, was 40,717 kg.

Sweep (*Scorpius lineolatus*)

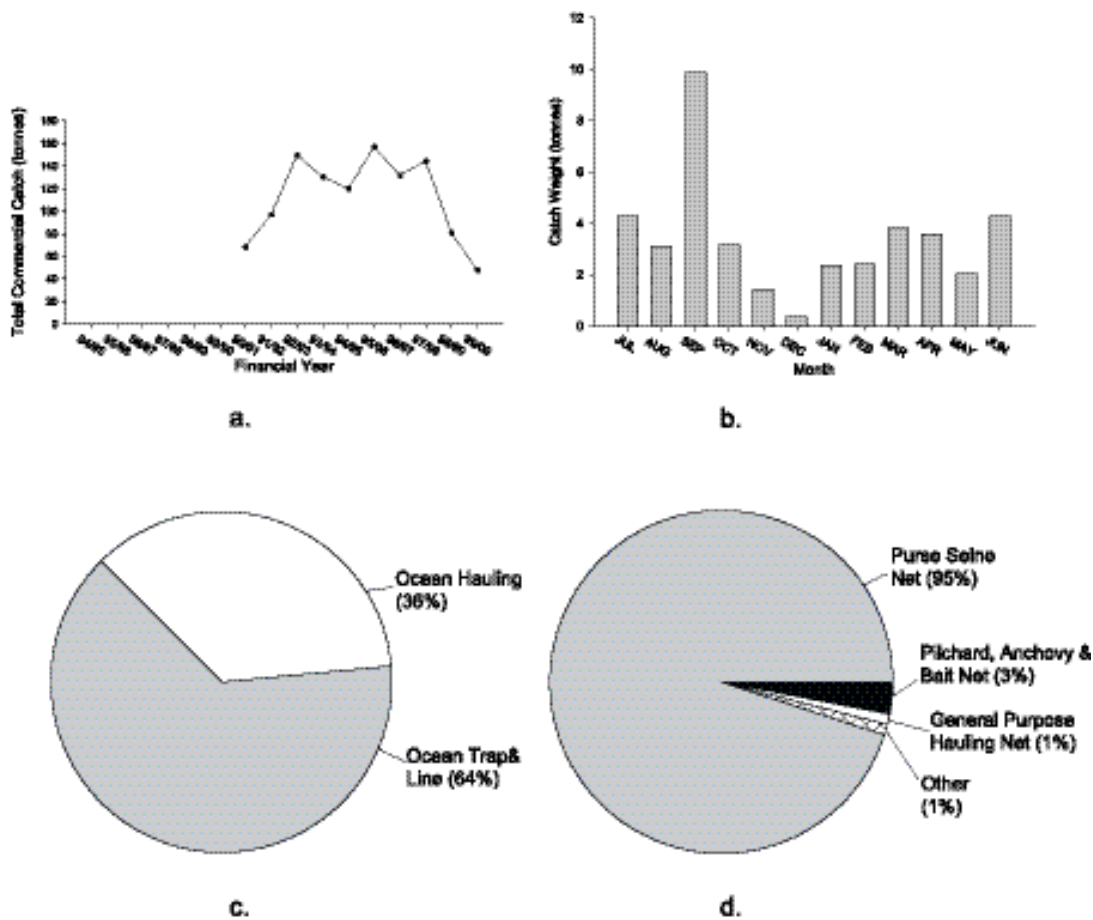


Figure 10a. The total reported commercial catch of sweep in NSW for the period of 1984/85 to 1999/2000 (**Note:** sweep were not recorded on commercial catch returns prior to 1990).

Figure 10b. The average reported catch per month of sweep in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 10c. The average percentage of reported catch of sweep between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 10d. The average percentage of reported catch of sweep by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

Silver trevally (*Pseudocaranx dentex*)

The following overview is based on information provided in Pease *et al.* (1981b), Kailola *et al.* (1993), Fletcher and McVea (2000), Neira *et al.* (1998), Rowling and Raines (2000), and the NSW Fisheries catch statistics database.

Silver trevally (*Pseudocaranx dentex*) occur in estuarine and coastal waters of all Australian states, and around northern New Zealand. Most of the Australian catch is taken in NSW and eastern Victoria. It is possible that catches from waters west of Bass Strait are comprised mainly of a different (but almost identical) species (*Pseudocaranx wrighti*). Silver trevally is a schooling species, which inhabits mainly sandy substrates. They feed on benthic invertebrates, including worms and molluscs, and also on benthic and planktonic crustaceans.

Female silver trevally have moderate fecundity (50,000–200,000 eggs) and spawn during an extended period from spring to autumn. Larvae occur in coastal waters throughout this period, and may enter estuaries before settling out as juveniles. Fish less than 10 cm in length were found in samples from Botany Bay between December and August, however the life history of juvenile trevally is poorly known. Maturation occurs between 18 and 25 cm in length. Although mature fish occur most often in ocean waters, they do enter estuaries at certain times.

Silver trevally is a relatively long lived, slow growing species, attaining a maximum age in excess of 25 years. In NSW coastal waters trevally reach a maximum size of about 65 cm fork length and weight of about 4 kg. Since the 1980s, the average size of silver trevally in catches has declined considerably and in recent years fish greater than about 35 cm in length (or 0.75 kg in weight) have been very poorly represented in catches. Commercial catches are dominated by young fish, less than about five years of age.

In estuarine waters, the main commercial catches of trevally are taken in the late summer and early autumn. The bulk of the catch is taken by haul nets in the large estuaries in the Sydney area. Significant catches of trevally are also taken by commercial fish trawl and trap fishers in ocean waters, and the species is very popular amongst recreational fishers in both estuarine and ocean waters. In the mid 1990s the annual catch of silver trevally from ocean waters by recreational fishers was estimated to be at least 130 tonnes.

There has been a significant decline in commercial landings of silver trevally since the mid 1980s, from about 1000 t per annum to around 300 t per annum. Most trevally are sold fresh at the Sydney and Melbourne fish markets where the species receives moderate prices (\$1.50 – \$2.50 per kg) depending on the quality of handling after capture. High quality ‘ice slurried’ trevally are also exported, receiving higher prices (\$3.50 - \$5.00 per kg).

Silver trevally (*Pseudocaranx dentex*)

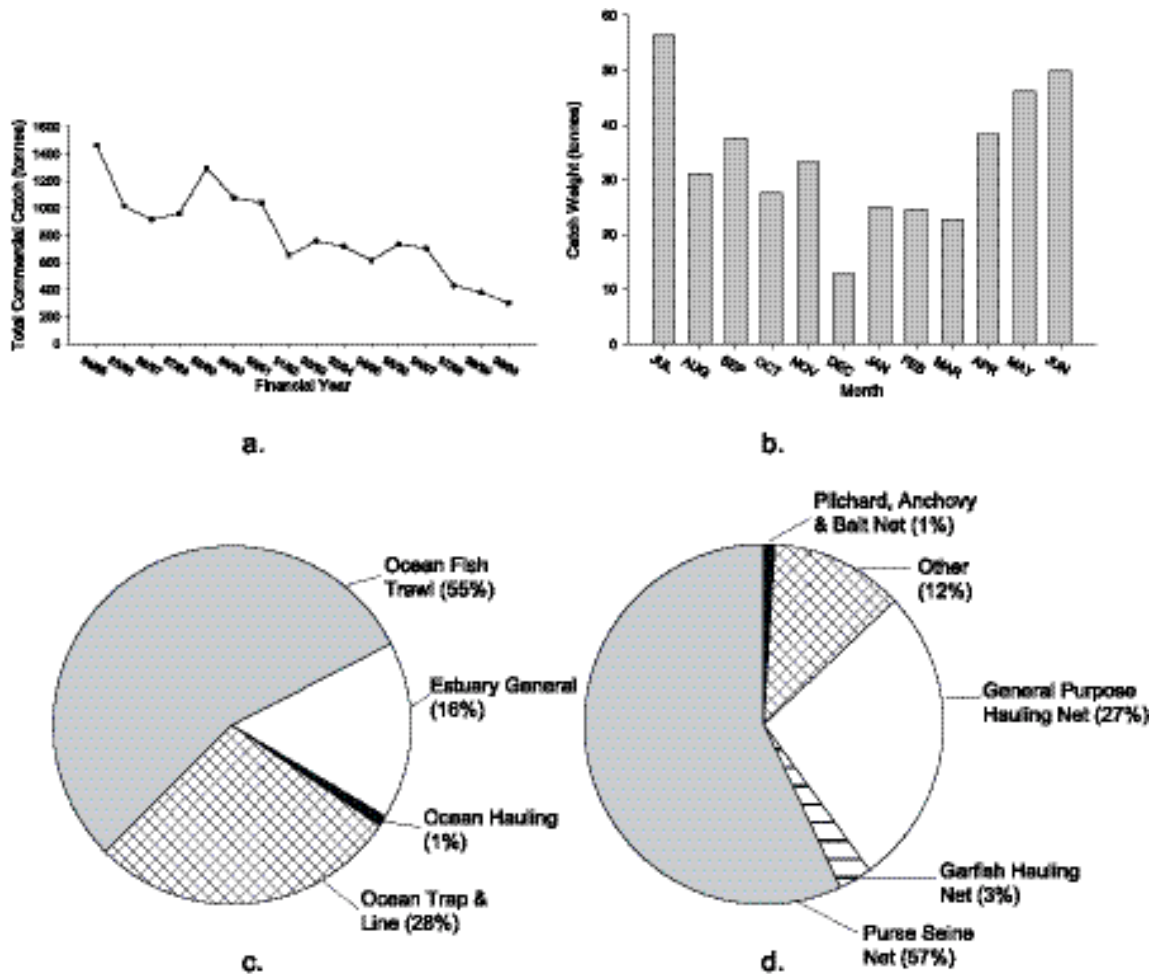


Figure 11a. The total reported commercial catch of silver trevally in NSW for the period of 1984/85 to 1999/2000.

Figure 11b. The average reported catch per month of silver trevally in the Ocean Hauling Fishery for the period of 1997/98 and 1998/99.

Figure 11c. The average percentage of reported catch of silver trevally between commercial fisheries for the period of 1997/98 and 1998/99.

Figure 11d. The average percentage of reported catch of silver trevally by gear types in the Ocean Hauling Fishery for the period 1997/98 and 1998/99.

F97/229

FISHERIES MANAGEMENT ACT 1994
Section 8 Notification - Fishing Closure
Shoalhaven and Crookhaven Rivers

I, Edward Obeid, prohibit the taking of fish by the methods of fishing specified in Column 1 of Schedules 1 to 5 of this notification, from the waters shown opposite in Column 2, respectively, of those schedules.

This prohibition will be effective from 3 April 2003 to 2 April 2008, (inclusive).

Fishing will also be subject to the conditions as specified in any schedule to this notification.

Note: The word 'Regulation', where appearing in this notification, refers to the *Fisheries Management (General) Regulation 2002*.

The Hon Edward Obeid OAM, MLC
Minister for Mineral Resources
Minister for Fisheries

Schedule 1

Crookhaven River entrance - traps and meshing nets

<i>Column 1</i> Methods	<i>Column 2</i> Waters
By means of traps of every description except the bait trap, and meshing nets except when used by the method known as ' splashing ' (that is shooting the net, splashing and retrieving it as a continuous operation), as prescribed by Regulation.	All waters of the Crookhaven River downstream to the ocean, from a line drawn from the western extremity of Orient Point, generally north-easterly to the south-eastern extremity of Haven Island, then generally easterly to the western extremity of the training wall on Comerong Island.

Schedule 2

Shoalhaven River Heads - netting closure

<i>Column 1</i> Methods	<i>Column 2</i> Waters
By means of nets of every description, with the exception of the hoop or lift net, hand-hauled prawn net, push or scissors net, the dip or scoop net and the landing net , as prescribed by Regulation.	The waters of that part of the Shoalhaven River , east of a line drawn on a bearing of 134 from the western foreshore boundary of lot 3 D.P. 14678 to a post on the southern bank of the river.

Schedule 3

Shoalhaven River (Tallowa Dam) Bass closure

<i>Column 1</i> Methods	<i>Column 2</i> Waters
All methods of fishing prohibited.	The waters of that part of the Shoalhaven River from the Tallowa Dam wall, downstream for a distance of 300 metres to a line drawn across the river indicated by two posts on opposite banks of the river.

Schedule 4

Weekend and Public Holiday netting closure

<i>Column 1</i> Methods	<i>Column 2</i> Waters
By means of nets of every description, except the following recreational nets: hoop or lift net, hand-hauled prawn net, push or scissors net, dip or scoop net and the landing net , and commercial nets: prawn net (hauling) , as prescribed by Regulation.	<p>a) The whole of the waters of the Shoalhaven River including its creeks, tributaries and inlets, from its source to its confluence with the Crookhaven River.</p> <p>b) The whole of the waters of the Crookhaven River including its creeks, tributaries and inlets, from its source to its confluence with the South Pacific Ocean.</p>
Conditions: During the months of May to August (inclusive): this closure will only apply from 8 a.m. Saturday to 5 p.m. Sunday in each week, and from 8 a.m. to 5 p.m. on any weekday Public Holiday. During the remainder of the year (during the months from September to April inclusive), this closure will only apply from 8 a.m. Saturday to 6 p.m. Sunday in each week, and from 8 a.m to 6 p.m. on any weekday Public Holiday.	

Schedule 5

Set mesh net closure

<i>Column 1</i> Methods	<i>Column 2</i> Waters
By means of meshing nets , except when used by the method known as ' splashing ' (that is shooting the net, splashing and retrieving it as a continuous operation), as prescribed by Regulation.	<p>a) The waters of that part of the Shoalhaven River and its tributaries, upstream from a line drawn across the river at Calymea Creek (including Calymea Creek).</p> <p>b) The waters of Broughton Creek and its tributaries, upstream of Black Forest Bridge (Bolong Road).</p>
Conditions: This closure will only apply from 15 May to 31 August in each year.	

Department of Land and Water Conservation

Land Conservation

DUBBO OFFICE

Department of Land and Water Conservation
 142 Brisbane Street (PO Box 865), Dubbo, NSW 2830
 Phone: (02) 6841 5200 Fax: (02) 6841 5231

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90 of the Crown Lands Act 1989, the reservation of Crown land specified in Column 1 of the Schedule hereunder is revoked to the extent specified opposite thereto in Column 2 of the Schedule.

JOHN AQUILINA, M.P.,
 Minister for Land and Water Conservation

SCHEDULE

COLUMN 1				COLUMN 2			
Land District: Mudgee				The part being			
Local Government Area: Mudgee Shire Council				Lot	DP No.	Parish	County
Locality: Ulan				69	750773	Ulan	Bligh
Reserve No. 73242				of an area of 351.3ha			
Public Purpose: Public Utility							
Notified: 29 July 1949							
Lot	DP No.	Parish	County				
2	750735	Bligh	Bligh				
69	750773	Ulan	Bligh				
30	755439	Lennox	Phillip				
177	755442	Moolarben	Phillip				
224	755442	Moolarben	Phillip				
225	755442	Moolarben	Phillip				
227	755442	Moolarben	Phillip				
232	755442	Moolarben	Phillip				
233	755442	Moolarben	Phillip				
156	755442	Moolarben	Phillip				
252	755442	Moolarben	Phillip				
259	755442	Moolarben	Phillip				
168	43500	Curryall	Bligh				
45	750750	Durrigere	Bligh				
263	755442	Moolarben	Phillip				
295	722886	Moolarben	Phillip				

File Reference: DB01H209/1

Notes: Conversion of Perpetual Lease 109025 into Incomplete Purchase 109025 - Sidney & Margaret Gibbs

FAR WEST REGIONAL OFFICE
Department of Land and Water Conservation
45 Wingewarra Street (PO Box 1840), Dubbo, NSW 2830
Phone: (02) 6883 3000 Fax: (02) 6883 3099

**ALTERATION OF CONDITIONS OF A WESTERN
LANDS LEASE**

IT is hereby notified that in pursuance of the provisions of Section 18J Western Lands Act 1901, the conditions of the undermentioned Western Lands Lease have been altered as shown.

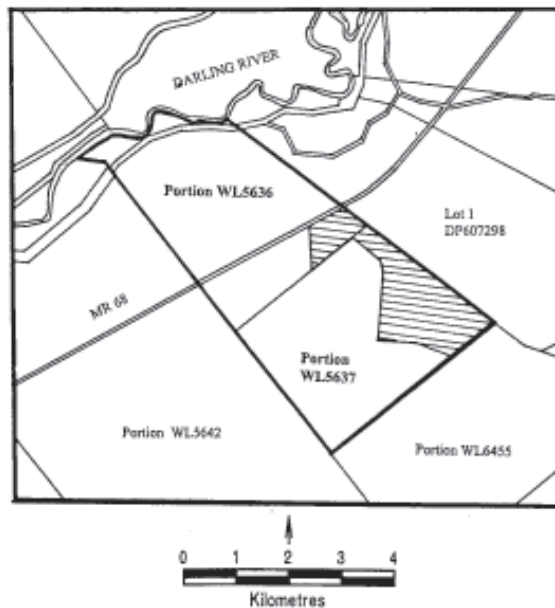
JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

*Administrative District and Shire – Wentworth;
Parish – Bulubula; County – Wentworth*

The conditions of Western Lands Lease No. 203, being the land contained within Folio Identifiers 5636/768535 and 5637/768536, have been altered effective from 17 February 2003 by the inclusion of the special conditions following. The conservation area indicated in the special conditions comprises 335 hectares.

**SPECIAL CONDITIONS ATTACHED TO
WESTERN LANDS LEASE 203**

1. The lessee shall erect and maintain a domestic stockproof standard fence surrounding the area shown hatched on the diagram hereunder and ensure the area remains ungrazed by both domestic stock and feral animals.
2. The lessee shall not clear any vegetation or remove any timber within the area shown hatched on the diagram hereunder unless written approval has been granted by either the Commissioner or the Minister.
3. The lessee shall manage the area shown hatched on the diagram hereunder in accordance with best management practices specified in the document known as "Southern Mallee Regional Guidelines for the Development of Land Use Agreements".
4. Special Condition 1 above shall be revoked, upon application by the lessee, in the event of the revocation of Cultivation Consent for any reason other than a breach of Consent condition(s).



APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2	COLUMN 3
The person for the time being holding the office of Mayor Of Broken Hill City Council, (ex-officio member)	Broken Hill Racecourse Board Of Trustees	Dedication No. 630055 Public Purpose: Racecourse Notified: 15 July 1949 File Reference: WL90R53/4
Michael John McKEE (new member)		
Margaret Mary CORRADINI (new member)		
Bernard John JEFFERY (new member)		
Bruce Ernest JAMES (new member)		
Kevin John TAYLOR (new member)		
Cheryl Ann KRUTLI (re-appointment)		

For a term commencing 22 February 2003 and expiring 21 February 2008.

GRIFFITH OFFICE

Department of Land and Water Conservation
2nd Floor, Griffith City Plaza,
120–130 Banna Avenue (PO Box 1030), Griffith NSW 2680
Phone: (02) 6962 7522 Fax: (02) 6962 5670

ESTABLISHMENT OF RESERVE TRUST

PURSUANT to section 92(1) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder is established under the name stated in that Column and is appointed as trustee of the reserve specified opposite thereto in Column 2 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2
Kikoira Public Recreation (R71567) And Kikoira Public Hall (R64091) Reserve Trust	Reserve No. 71567 Public Purpose: Public Recreation Notified: 29 June 1945 Reserve No. 64091 Public Purpose: Public Hall Notified: 4 August 1933 File Reference: GH03R4/1

GOULBURN OFFICE
Department of Land and Water Conservation
159 Auburn Street (PO Box 748), Goulburn, NSW 2580
Phone: (02) 4828 6725 Fax: (02) 4828 6730

DRAFT ASSESSMENT OF LAND AT YOUNG
UNDER PART 3 OF THE CROWN LANDS
ACT 1989 AND CROWN LANDS
REGULATIONS, 2000

A DRAFT Land Assessment has been prepared for Crown land situated at Young being land described hereunder.

Inspection of this Draft Assessment can be made at the Orange Office of Land NSW, Department of Land and Water Conservation, Cnr Kite and Anson Streets Orange 2800 (PO Box 2146) and Young Shire Council Chambers, during normal business hours.

Representations are invited from the public on the Draft Assessment. These may be made in writing for a period of 28 days commencing from 21st February 2003, and should be addressed to Louise Harcombe, Resource Compliance Unit, Orange at the above address.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Description

Parish – Young; County – Monteagle;
Land District and Shire – Young

Unsurveyed Crown land south of Lots 1 and 2 DP 736225 and Lots 3 and 4 DP 845187, of approximately 1.92 hectares. This land is currently held under Permissive Occupancy 1969/5 Young for grazing, and adjoining Crown land north of Lot 51 DP 804598 and Lot 1 DP 222244, of approx 5600m². Land occurs on the eastern outskirts of Young, in the vicinity of the showground, located on Victoria Gully.

Reference: GB80R42

GRAFTON OFFICE
Department of Land and Water Conservation
76 Victoria Street (Locked Bag 10), Grafton, NSW 2460
Phone: (02) 6640 2000 Fax: (02) 6640 2035

**PLAN OF MANAGEMENT FOR A CROWN
 RESERVE UNDER DIVISION 6 OF PART 5 OF
 THE CROWN LANDS ACT 1989 AND CROWN
 LANDS REGULATION 1990**

A DRAFT plan of management has been prepared for the Crown reserve described in Column 1, which is under the trusteeship of the Reserve Trust specified in Column 2 of the Schedule.

Inspection of the draft plan can be made at:

1. Department of Land and Water Conservation, Grafton
76 Victoria Street Grafton;
2. Bellingen Shire Council Administration Centre
33-39 Hyde St Bellingen; and
3. Urunga Library
Bonville St Urunga

during normal business hours.

Representations are invited from the public on the draft plan. These may be made in writing for a period of 28 days commencing from 20th February 2003 and should be sent to the Coordinator, Crown Land Access, North Coast, Department of Land and Water Conservation, Locked Bag 10 Grafton NSW 2460.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Description of Reserves

*Land District – Grafton; Shire – Bellingen;
Parish – Newry; County – Raleigh*

Schedule

COLUMN 1	COLUMN 2
Reserve No: 37514 for Public Recreation Notified 23 April 1904 Location: Hungry Head, south of Urunga NSW File No: GF 02 R 4	Hungry Head Beach Reserve Trust

**REVOCATION OF THE APPOINTMENT OF A
RESERVE TRUST**

PURSUANT to section 92(3) of the Crown Lands Act 1989, the appointment of the reserve trust specified in Column 1 of the Schedule hereunder, to the reserves specified opposite thereto in Column 2 of the Schedule, is revoked to the extent specified opposite thereto in Column 3 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2	COLUMN 3
Coffs Jetty Foreshore Reserve Trust	Reserve No. 140093 Public Purpose: Community and Sporting Club Facilities Notified: 8 December 1995 File Reference: GF03R4	The whole, being Lot 1 DP 714757, Lot 22 DP 850150, Parish of Coff, County of Fitzroy.
	Reserve No. 140102 Public Purpose: Public Recreation, Environmental Protection Notified: 28 June 1996 File Reference: GF03R5	The part of the reserve being Lot 545 DP 45256, Lot 2 DP 630934, Lot 206 DP 739570, Lot 1 DP 807876, Lot 21 DP 850150, Parish of Coff, County of Fitzroy.

**APPOINTMENT OF RESERVE TRUST AS
TRUSTEE OF PART OF A RESERVE**

PURSUANT to section 92(1) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder is appointed as trustee of the reserve specified opposite thereto in Column 2 of the Schedule to the extent specified opposite thereto in Column 3 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2	COLUMN 3
Coffs Coast State Park Trust	Reserve No.: 140102 Public Purpose: Public Recreation, Environmental Protection Notified: 28 June 1996 File Reference: GF03R5	The part of the reserve being Lot 545 DP 45256, Lot 2 DP 630934, Lot 206 DP 739570, Lot 1 DP 807876, Lot 21 DP 850150, Parish of Coff, County of Fitzroy.

**APPOINTMENT OF RESERVE TRUST AS
TRUSTEE OF A RESERVE**

PURSUANT to section 92(1) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder is appointed as trustee of the reserve specified opposite thereto in Column 2 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2
Coffs Coast State Park Trust	Reserve No. 140093 Public Purpose: Community and Sporting Club Facilities Notified: 8 December 1995 File Reference: GF03R4

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedules hereunder are appointed, for the terms of office specified in that Column, as members of the trust boards for the reserve trusts specified opposite thereto in Column 2, which have been established and appointed as trustee of the reserves referred to opposite thereto in Column 3 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE 1

COLUMN 1	COLUMN 2	COLUMN 3
Anthony Blake RODEN (re- appointment) Peter Wayne LARSEN (re- appointment) Alexander George LARSEN (re- appointment)	Tuntable Creek Public Hall	Reserve No. 89178 Public Purpose: Public Hall Notified: 11 April 1974 File Reference: GF81R364

For a term commencing the date of this notice and expiring 20 February 2008.

SCHEDULE 2

COLUMN 1	COLUMN 2	COLUMN 3
Robert Charles JARMAN (new member) Beverly Ann BIRMINGHAM (new member) Malcolm William WALLIS (new member)	Kyogle Recreation Area (R69556) Reserve Trust	Reserve No. 69556 Public Purpose: Public Recreation Notified: 27 September 1940 File Reference: GF02R74

For a term commencing 01 March 2003 and expiring 29 February 2008.

MAITLAND OFFICE
Department of Land and Water Conservation
Cnr Newcastle Road & Banks Street (PO Box 6), East Maitland, NSW 2323
Phone: (02) 4934 2280 Fax: (02) 4934 2252

NOTIFICATION OF CLOSING OF ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

JOHN AQUILINA, M.P.,
 Minister for Land and Water Conservation
 and Minister for Fair Trading

Description

*Parish – Kincumber; County – Northumberland;
 Land District – Gosford; Local Government Area – Gosford*

Road Closed: Lots 1 & 2 DP 1046573 at Killcare Heights, subject to easement for electricity line 7 metres wide created by Deposited Plan 1046573 (being land within Computer Folios 1/1046573 & 2/1046573).

File Reference: MD01 H214

Note: On closing, the land within Lots 1 & 2 DP 1046573 will remain vested in Gosford City Council as operational land.

ra150

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90 of the Crown Lands Act 1989, the reservation of Crown land specified in Column 1 of the Schedule hereunder is revoked to the extent specified opposite thereto in Column 2 of the Schedule.

JOHN AQUILINA, M.P.,
 Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2
Land District: Maitland	The whole being
Local Government Area: Maitland City Council	Lot D.P. No. Parish County
Locality: East Maitland	451 821118 Maitland Northumberland
Reserve No. 87935	of an area of 7472m ²
Public Purpose: Children's Playground	
Notified: 4 September 1970	
File Reference: MD01R15/1	

Notes: The land is being disposed of by way of private treaty sale

ORANGE OFFICE

Department of Land and Water Conservation
92 Kite Street (PO Box 2146), Orange NSW 2800
Phone: (02) 6393 4300 Fax: (02) 6362 3896

DRAFT ASSESSMENT OF LAND AT PORTLAND UNDER PART 3 OF THE CROWN LANDS ACT 1989 AND CROWN LANDS REGULATIONS, 2000

A DRAFT Land Assessment has been prepared for Crown land situated at Portland being land described hereunder.

Inspection of this Draft Assessment can be made at the Orange Office of Land NSW, Department of Land and Water Conservation, Cnr Kite and Anson Streets Orange 2800 (PO Box 2146) and Greater Lithgow City Council Chambers, during normal business hours.

Representations are invited from the public on the Draft Assessment. These may be made in writing for a period of 28 days commencing from 21st February 2003, and should be addressed to Louise Harcombe, Resource Compliance Unit, Orange at the above address.

JOHN AQUILINA, M.P.,
 Minister for Land and Water Conservation

Description

*Parish – Cullen Bullen; County – Roxburgh;
 Land District and Shire – Lithgow*

A parcel of Crown land being Lots 249 – 253 DP 755769, currently Reserve 79697 from Sale for Future Public Requirements, gazette 28th June 1957, of 2.43 hectares. The land is currently licenced for grazing horses, with formed road frontage along Creek Street, Portland.

Reference: OE80H1547

SYDNEY METROPOLITAN OFFICE
Department of Land and Water Conservation
2-10 Wentworth Street (PO Box 3935), Parramatta, NSW 2124
Phone: (02) 9895 7503 Fax: (02) 9895 6227

NOTIFICATION OF CLOSING OF ROADS

IN pursuance of the provisions of the Roads Act, 1993, the roads hereunder specified are closed and the roads cease to be public roads and the rights of passage and access that previously existed in relation to the roads are extinguished.

JOHN AQUILINA, M.P.,
 Minister for Land and Water Conservation

—————
 Descriptions

Land District – Metropolitan; L.G.A. – Pittwater

Lots 100 – 103 inclusive, DP 1033854 at Warriewood, Parish Narrabeen (Sheet 4), County Cumberland, (being land in CsT Vol. 867 Folio 24 and Vol. 4968 Folio 11).

MN00H274.

Note: On closing, title for the land in lots 100 – 103 inclusive remain vested in Pittwater Council as operational land.

—————
 Descriptions

Land District – Penrith; L.G.A. – Blue Mountains

Lot 1, DP 1049363 at Leura, Parish Blackheath, County Cook (being land in F/I 19/6211).

MN02H37.

Note: On closing, title for the land in lot 1 remains vested in Blue Mountains City Council as operational land.

ROADS ACT 1993**ORDER****Transfer of Crown Roads to Council**

IN pursuance of the provisions of Section 151, Roads Act, 1993, the Crown roads specified in Schedule 1 are transferred to the Roads Authority specified in Schedule 2, hereunder, as from the date of publication of this notice and as from that date the roads specified in Schedule 1 cease to be Crown roads.

JOHN AQUILINA, M.P.,
 Minister for Land and Water Conservation

—————
 SCHEDULE 1

*Land District – Penrith; Local Government Area – Penrith;
 Parish – Castlereagh; County – Cumberland*

The Crown public road 20.115 metres wide extending southerly from Wilshire Road, Londonderry to the southwestern corner of Lot 9 DP 12908.

SCHEDULE 2

Roads Authority: Penrith City Council.

File No.: MN03H27.

—————
 SCHEDULE 1

*Land District – Metropolitan;
 Local Government Area – Liverpool;
 Parish – St Luke; County – Cumberland*

- The part of Kurrajong Road, Prestons and Old Kurrajong Road, Casula extending from the northwestern corner of lot 1710 DP 1011565 easterly to the Hume Highway.
- Ash Road, Prestons between Camden Valley Way and Kurrajong Road.
- Ash Road, Prestons extending southerly and south westerly from Hoxton Park Road to the northern boundary of lot 286 DP 752060.
- Jedda Road, Lurnea extending from the north western corner of lot 13 DP 7326 easterly to Hill Road.
- An eight metre width of Joadja Road on its eastern side.
- Wonga Road, Lurnea between Jedda Road and Kurrajong Road.
- Hillview Parade, Lurnea between Wonga Road and Webster Road.
- Hill Road, Lurnea extending northerly from Hillview Parade to the north eastern corner of lot 1 DP 211007.
- Reilly Street, Lurnea westerly from Webster Road.
- Webster Road, Lurnea from Hillview Parade northerly to a point one (1) metre north of the north eastern corner of lot 19 DP 32100.
- Lyn Parade, Prestons between Jedda Road and Hoxton Park Road.
- A ten metre width of West Street, Lurnea on its western side.
- Wilson Road from the southern side of its intersection with Baldini Place, Hinchinbrook to a point twenty-four metres south of the southwestern corner of lot 1 DP 934856 (being the northern boundary of an unnotified reserve).

—————
 SCHEDULE 2

Roads Authority: Liverpool City Council.

File No: MN02H117.

TAMWORTH OFFICE
Department of Land and Water Conservation
25-27 Fitzroy Street (PO Box 535), Tamworth, NSW 2340
Phone: (02) 6764 5100 Fax: (02) 6766 3805

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

JOHN AQUILINA, M.P.,
 Minister for Land and Water Conservation

SCHEDULE

Column 1	Column 2	Column 3
Craig Anthony DREW	Trustees of Moore Creek Caves Reserve	Dedication No: 93446 Public Purpose: Plantation Notified: 22 August 1980 Locality: Moore Creek

Terms of Office

For a term commencing on the 18 February 2003 and expiring on 27 June 2007. File No. TH80R85/3.

ERRATUM

THE following notice appeared in the *Government Gazette* No. 39, folio 1031 dated 7 February 2003 under the heading of "Notification of Closing of Roads". Delete the phrase "not being land under the Real Property Act".

File No: TH01H226

WAGGA WAGGA REGIONAL OFFICE
Department of Land and Water Conservation
Corner Johnston and Tarcutta Streets (PO Box 60), Wagga Wagga, NSW 2650
Phone: (02) 6921 2503 Fax: (02) 6921 1851

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90 of the Crown Lands Act 1989, the reservation of Crown land specified in Column 1 of the Schedule hereunder is revoked to the extent specified opposite thereto in Column 2 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2			
Land District: Wagga Wagga	The whole being			
Local Government Area: Wagga Wagga City Council	Lot	D.P. No.	Parish	County
Locality: North Wagga Wagga	7004	751422 #	North Wagga Wagga	Clarendon
Reserve No. 53275	448	751422	North Wagga Wagga	Clarendon
Public Purpose: Quarry	of an area of 20.235ha			
Notified: 2 May 1919				
File Reference: WA02R10				

Notes: It is intended to reserve the land for Environmental Protection upon revocation of this reservation.

Disclaimer: # Please note that the above Lot numbers marked # are for Departmental use only.

SCHEDULE

COLUMN 1	COLUMN 2			
Land District: Wagga Wagga	The whole being			
Local Government Area: Wagga Wagga City Council	Lot	D.P. No.	Parish	County
Locality: North Wagga Wagga	7004	751422 #	North Wagga Wagga	Clarendon
Reserve No. 71217	448	751422	North Wagga Wagga	Clarendon
Public Purpose: Future Public Requirements	of an area of 20.235ha			
Notified: 12 May 1944				
File Reference: WA02R10				

Notes: It is intended to reserve this land for Environmental Protection upon completion of the revocation action.

Disclaimer: # Please note that the above Lot numbers marked # are for Departmental use only.

RESERVATION OF CROWN LAND

PURSUANT to section 87 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the schedule hereunder is reserved as specified opposite thereto in Column 2 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2
Land District: Wagga Wagga	Reserve No. 1004188
Local Government Area: Wagga Wagga City Council	Public Purpose: Environmental Protection
Locality: North Wagga Wagga	
Lot	Parish
448	North Wagga Wagga
7004	North Wagga Wagga
	County
	Clarendon
	Clarendon

Area: 20.235ha

File Reference: WA02R10

Disclaimer: # Please note that the above Lot numbers marked # are for Departmental use only.

ADDITION TO RESERVED CROWN LAND

PURSUANT to section 88 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the Schedule hereunder is added to the reserved land specified opposite thereto in Column 2 of the Schedule.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

SCHEDULE

COLUMN 1	COLUMN 2			
Land District: Wagga Wagga	Reserve No. 89000			
Local Government Area: Wagga Wagga City Council	Public Purpose: College Of Advanced Education			
Locality: Charles Sturt University	Notified: 14 September 1973			
Description: Lot 1 in DP 48642	Lot	D.P. No.	Parish	County
Parish: Gobbagombalin	154	751407	Gobbagombalin	Clarendon
County: Clarendon	7001	751407 #	Gobbagombalin	Clarendon
Area: 3795m ²	157	39925	Gobbagombalin	Clarendon
File Reference: WA97H46	164	40887	Gobbagombalin	Clarendon
	98	751407	Gobbagombalin	Clarendon
	167	46875	Gobbagombalin	Clarendon
	155	39925	Gobbagombalin	Clarendon
	153	751407	Gobbagombalin	Clarendon
	166	46875	Gobbagombalin	Clarendon
	New Area: 708ha			

Disclaimer: # Please note that the above Lot numbers marked # are for Departmental use only.

NOTIFICATION OF CLOSING OF A ROAD

IN pursuance of the provisions of the Roads Act, 1993, the road hereunder specified is closed, the road ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Description

*Parish – Henty; County – Hume;
Land District – Albury; Shire – Culcairn*

Lot 1 in DP 1048881 at Henty.

File No WA02H66.

Note: On closing, the land within the former Council public road will remain vested in the Council of the Shire of Culcairn as operational land.

Water Conservation

NOTICE UNDER SECTION 22B OF THE WATER ACT

THE Department of Land and Water Conservation pursuant to section 22B of the Water Act 1912, being satisfied that the quantity of water available or likely to be available in the Unregulated Macintyre River and Kings Plain Subcatchment to meet all requirements with respect to the taking of water therefrom, hereby gives notice to all holders of permits, authorities and licences issued under Part 2 of the Water Act that as from 10th February, 2003, extraction of water other than for stock and domestic purposes is hereby suspended until further notice. GA2460843.

RANDALL HART,
Regional Director
Barwon Region

NOTICE UNDER SECTION 22B OF THE WATER ACT

Unregulated Catchments

THE Department of Land and Water Conservation pursuant to section 22B of the Water Act 1912, being satisfied that the quantity of water available or likely to be available in the Cobbadah Creek and Pallal Creek to meet all requirements with respect to the taking of water therefrom, hereby gives notice to all holders of permits, authorities and licences issued under Part 2 of the Water Act that as from 10th February, 2003, extraction of water other than for stock and domestic purposes is hereby suspended until further notice. GA2460845.

RANDALL HART,
Regional Director
Barwon Region

WATER ACT 1912

AN application under Part 2 of the Water Act 1912 being within a Proclaimed (declared) local area under section 5 (4) of the Act.

An application for a licence under section 10 of Part 2 of the Water Act 1912, has been received as follows:

Barwon/Darling River Valley

Robin John FILES and Donna Lynn FILES for 1 pump on the Darling River, Crown Land Fronting Lot 704/761816, Parish of Perry, County of Menindee, for domestic purposes (new licence – domestic purpose only). (Ref:60SL085402) (GA2:499562).

Written objections to the applications specifying the grounds thereof may be made by any statutory authority or local occupier within the proclaimed local area and must be lodged within the Department's Natural Resource Project Officer at Buronga within twenty-eight (28) days as provided by the Act.

P. WINTON,
Natural Resource Project Officer
Murray Region

Department of Land and Water Conservation
PO Box 363 32 Enterprise Way BURONGA NSW 2739
Ph: (03) 5021 9400

WATER ACT 1912

APPLICATIONS under Part 2 within Proclaimed (declared) local areas under section 5 (4) of the Act 1912.

Applications for licences under section 10 for works within a Proclaimed (declared) local area as generally described hereunder have been received from:

Castlereagh River Valley

Warren James SCIFLEET and Carlene SCIFLEET for a pump on the Castlereagh River, Lot 72, DP 754983, Parish of Toorawandi, County of Napier for water supply for stock and domestic purposes and irrigation of 15 hectares (lucerne and cereals) (replacing existing entitlement by way of permanent transfer) (80SL96074). GA2:306583

Macquarie River Valley

BINNIJIG PTY LIMITED for a pump on the Fish River, Lot 3110, DP 1037177, Parish of Kendale, County of Westmoreland for water supply for stock and domestic purposes and irrigation of 2 hectares (grapes and berries) (partly replacing existing entitlement) (80SL96073).

David William RINGLAND and Heather Jean RINGLAND for 4 pumps on the Macquarie River, Lots 7, 16 and 21, DP 752572, Parish of Coolbaggie, County of Ewenmar for irrigation of 131.75 hectares (wheat, barley, lucerne, corn) (partly replacing existing entitlement by way of permanent transfer and combining with existing entitlement) (80SL96075).

AN application for an amended authority for a joint water supply under section 20E(2) has been received from:

AIRCO HOLDINGS PTY LIMITED and OTHERS for 4 pumps on the Cudgegong River, Road Reserve Adjacent to Lot 84, DP 755431, Parish of Galambine, County of Phillip for water supply for stock and domestic purposes and irrigation of 89.2 hectares (grapes) (replacement authority – no increase in area) (80SA10600).

Written objections to the applications specifying grounds thereof, may be made by any statutory authority or local occupier within the proclaimed local (declared) area and must be lodged with the Department's Regional Office at Dubbo, within twenty-eight (28) days as prescribed by the Act.

Any inquiries regarding the above should be directed to the undersigned, telephone (02) 6884 2560). GA2: 306582

FRED HUNDY,
Water Access Manager, Macquarie

Department of Land and Water Conservation
PO Box 717 DUBBO NSW 2830

NOTICE UNDER SECTION 22B OF THE WATER ACT 1912

Pumping Restrictions

Hastings River, Forbes River, Thone River, Ellenborough
River And Their Tributaries

THE Department of Land and Water Conservation pursuant to section 22B of the Water Act 1912, is satisfied that the

quantity of water available in Hastings River, Forbes River, Thone River, Ellenborough River and their tributaries is insufficient to meet all requirements and hereby gives notice to all holders of permits, authorities and licences under Part 2 of the Act that from Thursday, 20 February 2003 and until further notice, the right to pump water is **RESTRICTED** to a maximum of ten hours in any twenty four hour period between the hours of 5pm and 11am.

This restriction excludes water supply for town water supply, stock, domestic and farming (fruit washing and dairy washdown) purposes.

Any person who contravenes the restrictions imposed by this notice is guilty of an offence and is liable on conviction to a penalty not exceeding:

- a) where the offence was committed by a Corporation – 200 penalty units.
- b) where the offence was committed by any other person – 100 penalty units.

One penalty unit = \$110.00.

Dated this 18th day of February 2003.

G. LOLLBACK,
Resource Access Manager
NORTH COAST REGION
GRAFTON (GA2: 467871)

WATER ACT 1912

AN APPLICATION for an Approval under section 167 (1) of Part 8 of the Water Act 1912 for Approval of a Controlled Work, has been received from:

MAC'SCON PTY LIMITED for an earthen bund (levee) on Nambucca River Lot 42, DP 788702, Parish Buckra Bendinni, County Raleigh for the prevention of inundation of land by floodwater and to act as an acoustic control device for the proposed development (new approval) (Our Ref: 6134761 – GA2: 467868).

AN APPLICATION for a Licence under Part V of the Water Act 1912, has been received from:

MAC'SCON PTY LIMITED for an excavation on Lot 42, DP 788702, Parish Buckra Bendinni, County Raleigh for Industrial (sand and gravel) purposes (new licence) (Our Ref: 6134710).

Any enquiries regarding the above should be directed to the undersigned (telephone 02 6640 2000). Written objections specifying the grounds thereof must be lodged within 28 days of the date of this publication as prescribed by the Act.

G. LOLLBACK,
Resource Access Manager
NORTH COAST REGION
GRAFTON

WATER ACT 1912

AN APPLICATION for a licence under section 10 of the Water Act 1912, as amended, has been received from:

Daryl Wayne BOOTH for a pump on Macleay River Lot 104, DP 804497, Parish Yarravel, County Dudley for irrigation of 1.5 hectares (4 megalitres) (new licence – entitlement by way of permanent transfer) (Our Ref: 6127068 – GA2: 467869).

Glenn Andrew DONNELLY, Diana Jayne DONNELLY and TWUA PTY LIMITED for a pump on Barlings Creek Lots 151, 152, 153 and 157, DP 755742, Parish Tomki, County Rous for irrigation of 68 hectares (102 megalitres) (new licence – entitlement by way of permanent transfer) (Our Ref: 6133406 GA2:- 467870).

Ross Adrian EMERSON and Michele Joy EMERSON for a pump on Maguires Creek Easement within Lot 3, DP 285605, Parish Tuckombil, County Rous for water supply for domestic purposes (new licence) (Our Ref: 613473A).

James Agnew Kenelm RAMSAY and Margaret Jean RAMSAY for three dams and a pump on an unnamed watercourse Lot 9, DP 751077, Parish Robertson, County Buller for conservation of water for stock purposes (new licence) (Our Ref: 6127071).

Garry William RESTALL for a pump on Terania Creek Lot 1, DP 121381, Parish Blakebrook, County Rous for irrigation of 10.5 hectares (32 megalitres) (replacement application – relocation of pump site no increase in authorised area or allocation) (Our Ref: 6134816).

Neil James MORGAN and Lynette Joy MORGAN for a pump on Macleay River Lots 40, 41 and 76, DP 752429, Parish Uralgurra, County Dudley for irrigation of 5 hectares (12 megalitres) (new licence – entitlement by way of permanent transfer) (Our Ref: 6134834 – GA2: 467872).

Brian Robert SOWTER for a pump on Macleay River Lot 117, DP 839576 and Lot 275, DP 752412 and a dam and a pump within Lot 275, DP 752412, Parish Cooroobongatti, County Dudley for conservation of water, water supply for farming (dairy washdown) purposes and irrigation of 1 hectare (3 megalitres) (new licence – entitlement by way of permanent transfer) (Our Ref: 613482B).

Edward Alfred CLARKE and Peggy CLARKE for a dam and a pump on an unnamed watercourse Lots 42, 50 and 66, DP 752843, Parish Tallawudjah, County Fitzroy for conservation of water and water supply for stock and domestic purposes (new licence) (Our Ref: 613453A – GA2: 467873).

Matthew Patrick O'MEARA for a pump on Carrs Creek Lots 2 and 4, DP 860686, Parish Great Marlow, County Clarence for irrigation of 0.5 hectare (2 megalitres) (new licence – entitlement by way of permanent transfer) (Our Ref: 6134543).

Trevor Robert MCLENNAN for a pump on Clarence River Lot 7010, DP 1029937, Parish Rushforth, County Clarence for irrigation of 2 hectares (10 megalitres) (new licence – entitlement by way of permanent transfer) (Our Ref: 613429A).

Any enquiries regarding the above should be directed to the undersigned (telephone 02 6640 2000). Written objections specifying the grounds thereof must be lodged within 28 days of the date of this publication as prescribed by the Act.

G. LOLLBACK,
Resource Access Manager
NORTH COAST REGION, GRAFTON

WATER ACT 1912

APPLICATIONS under Part 2 within a Proclaimed (declared) local area under section 5 (4) of the Water Act 1912.

An application for a licence under section 10 for works within a proclaimed (declared) local area as generally described hereunder has been received from:

Murrumbidgee Valley

Kevin John and Dorothy Rosemary JOLLIFFE and Shane Kevin and Joanne Louise JOLLIFFE for a pump on the Murrumbidgee River on Lot 20, DP 750832, Parish of Currawananna, County of Bourke for a water supply for stock and domestic purposes and irrigation of 127.16 hectares (summer crops). New Licence- due to inclusion of an additional stock and domestic supply. (Reference: 40SL70870).

Any enquiries regarding the above should be directed to the undersigned (telephone 02 6953 0700).

Formal objections to the application specifying the grounds thereof, may be made by any statutory authority or a local occupier within the proclaimed area and must be lodged with the Department's Regional Director at Leeton within the 28 days as fixed by the Act.

S. F. WEBB,
Resource Access Manager
Murrumbidgee Region

Department of Land and Water Conservation
PO Box 156, LEETON NSW 2705

WATER ACT 1912

APPLICATIONS under Part 2 within a Proclaimed (declared) local area under section 5 (4) of the Water Act 1912.

Applications for a licence under section 20 for works within a proclaimed (declared) local area as generally described hereunder have been received from:

Murrumbidgee Valley

GANERA PTY LIMITED for 4 pumps on the Murrumbidgee River on Lots 36 and a part Lot 50, DP 756775; 1 pump on Uara Creek, Lot 14 and a diversion channel on Uara Creek, Lot 13, DP 756775, Parish of Nerang, County of Waradgery for a water supply for stock and domestic purposes and irrigation of 644 hectares, (pasture and cereals). Application to replace existing entitlements and the permanent water transfer of 202 megalitres. (Reference: 40SA5604).

Any enquiries regarding the above should be directed to the undersigned (telephone (02) 6953 0700).

Formal objections to the application specifying the grounds thereof, may be made by any statutory authority or a local occupier within the proclaimed area and must be lodged with the Department's Regional Director at Leeton within the 28 days as fixed by the Act.

S. F. WEBB,
Resource Access Manager
Murrumbidgee Region

Department of Land and Water Conservation
PO Box 156, LEETON NSW 2705

WATER ACT 1912

AN APPLICATION for a licence under the section 10 of Part 2 of the Water Act 1912, as amended, has been received as follows:

Daniel and Julie-Ann Mary SAMMUT for a pump on the Hawkesbury River, Part Lot2//212263 (Streeton Lookout), Parish of Ham Common, County of Cumberland for the irrigation of 10.0 hectares (Turf)(Part replacement licence-Transfer of Volumetric entitlement from 10SA2512) (Not subject to 1995 Hawkesbury Nepean Embargo) (Ref:10SL56478)(GA2:462924).

Any inquiries regarding the above should be directed to the undersigned (Ph: 9895 7194).

Written objections specifying grounds thereof must be lodged with the Department within 28 days of the date of this publication as prescribed by the Act.

WAYNE CONNERS,
A/Natural Resource Project Officer
Sydney/South Coast Region

Department of Land and Water Conservation
PO Box 3935, PARRAMATTA NSW 2124

WATER ACT 1912

AN APPLICATION under Part 2, being within a proclaimed (declared) local area under section 10 of the Water Act 1912, as amended.

Application for a licence within a proclaimed local area as generally described hereunder has been received as follows:

Macintyre – Dumaresq River Valley

YEO & CO PTY LIMITED for a pump on the Macintyre River on Lot 45, DP 47940, Parish of Inverell, County of Gough for irrigation of 1.5 hectares (fodder crops). New licence – permanent transfer of existing entitlement. L.O. Papers 90SL100668. GA2460846.

Written objections to the application specifying the grounds thereof may be made by any statutory authority or local occupier within the proclaimed (declared) area, whose interest may be affected and must be lodged with the Department's Manager, Resource Access, Tamworth within 28 days as specified in the Act.

GEOFF CAMERON,
Manager Resource Access

Department of Land and Water Conservation
PO Box 550, Tamworth NSW 2340

Riverina Highlands Regional Vegetation Management Plan 2003

under the

Native Vegetation Conservation Act 1997

I, the Minister for Land and Water Conservation, make the following regional vegetation management plan under the *Native Vegetation Conservation Act 1997*.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Riverina Highlands Regional Vegetation Management Plan 2003

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Riverina Highlands Regional Vegetation Management Plan 2003

Clause 1

Preliminary

Part 1

Riverina Highlands Regional Vegetation Management Plan 2003

Part 1 Preliminary

1 Name of plan

This plan is the *Riverina Highlands Regional Vegetation Management Plan 2003*.

2 Commencement

This plan commences 3 months after it is published in the Gazette.

Note. It is intended that the operation of this plan should be reviewed by the Riverina Highlands Regional Vegetation Committee no later than 5 years after its commencement.

3 Definitions

(1) In this plan:

biolink means a link in vegetation in a largely cleared landscape critical for ecosystem function, including the movement of flora and fauna for the maintenance of viable populations.

clearing has the same meaning as in the Act.

native vegetation has the same meaning as in the Act.

plan of management for a regional linear reserve means a plan of management that identifies the conservation status of the reserve and sets out management regimes for the reserve.

regional linear reserve means land that is not regional protected land, but that is:

- (a) the site of a rail line that is treated by the Rail Infrastructure Corporation as a non-operational rail line for inspection purposes, or
- (b) a travelling stock reserve or route, or
- (c) dedicated for road purposes, or
- (d) a Crown road or reserve or a common.

regional protected land means land identified as such in clause 4.

Clause 3 Riverina Highlands Regional Vegetation Management Plan 2003

Part 1 Preliminary

the Act means the *Native Vegetation Conservation Act 1997*.

the region means the part of the State designated under section 8 of the Act as the Riverina Highlands region.

unclassified land means all land to which this plan applies that is neither regional protected land nor within a regional linear reserve.

- (2) For the purposes of this plan, a reference to a map is to a map held in the office of the Department of Land and Water Conservation.

4 Regional protected land

- (1) The following land is identified as *regional protected land* for the purposes of the Act:
- (a) *regional protected land—steep and erodible land*, being land shown as steep or erodible land on the map marked “Riverina Highlands Regional Vegetation Committee—Regional Steep and Erodible Land”, and
 - (b) *regional protected land—streamsides*, being land that is not regional protected land—steep and erodible land, but that is situated within, or within 20 metres of, the bed or bank of a stream classified as being of a 3rd or higher order under the Strahler system when applied to the streams shown as lines on the relevant map. The *relevant map* is the most recent of the topographic maps of a scale of 1:25,000 for the land concerned published by and available from Land and Property Information.

5 Land to which this plan applies

This plan applies to all of the land in the region, subject to clause 6.

6 Land and clearing excluded by the Act

- (1) This plan does not apply to land excluded from the operation of the Act by section 9 of the Act.

Note. Section 9 excludes the following land:

- (a) land that is within a zone designated “residential” (but not “rural-residential”), “village”, “township”, “industrial” or “business” under an environmental planning instrument,
- (b) land to which *State Environmental Planning Policy No 14—Coastal Wetlands* applies,
- (c) land to which *State Environmental Planning Policy No 26—Littoral Rainforests* applies,

Riverina Highlands Regional Vegetation Management Plan 2003

Clause 6

Preliminary

Part 1

- (d) land that is a State forest, national forest, flora reserve or timber reserve under the *Forestry Act 1916*,
 - (e) land that is acquired under section 15 of the *Forestry Act 1916* for the purposes of a State forest (not being any such land that is acquired for the purpose of a timber plantation within the meaning of the *Timber Plantations (Harvest Guarantee) Act 1995*),
 - (f) land that is dedicated or reserved under the *National Parks and Wildlife Act 1974*,
 - (g) land that is acquired under section 145 of the *National Parks and Wildlife Act 1974* for the purpose of obtaining land for dedication or reservation under that Act or for the purpose of preserving, protecting and preventing damage to relics or Aboriginal places,
 - (h) land that is subject to a conservation agreement entered into under Division 7 of Part 4 of the *National Parks and Wildlife Act 1974*,
 - (i) land that is subject to an interim protection order made under Part 6A of the *National Parks and Wildlife Act 1974*,
 - (j) land to which an interim heritage order or listing on the State Heritage Register under the *Heritage Act 1977* applies,
 - (k) land that is critical habitat,
 - (l) Lord Howe Island.
- (2) This plan does not apply to clearing excluded from the operation of the Act by section 5 (4) or 12 of the Act.

Note. Section 5 (4) declares that clearing does not include sustainable grazing. Section 12 excludes the following types of clearing:

- (a) any clearing authorised under the *State Emergency and Rescue Management Act 1989* in relation to an emergency within the meaning of that Act,
- (b) any clearing authorised under the *Rural Fires Act 1997* in relation to any emergency fire fighting act within the meaning of that Act,
- (c) any clearing carried out in accordance with a bush fire management plan under the *Rural Fires Act 1997*,
- (d) any clearing authorised under the *Noxious Weeds Act 1993*,
- (e) any clearing carried out in accordance with a property management plan approved by the Director-General of National Parks and Wildlife for the purposes of the *Threatened Species Conservation Act 1995*,
- (f) any clearing authorised under a licence issued under Division 1 of Part 6 of the *Threatened Species Conservation Act 1995*,
- (g) any clearing that is, or that is part of, designated development within the meaning of the EPA Act,
- (h) any clearing authorised to be carried out under Division 3 or 4 of Part 7 of the *Fisheries Management Act 1994*,
- (i) any clearing authorised under a licence issued under Division 6 of Part 7A of the *Fisheries Management Act 1994*,
- (j) any clearing carried out in accordance with a licence issued under section 131 of the *National Parks and Wildlife Act 1974*,
- (k) any clearing authorised under the *Mining Act 1992*,
- (l) any clearing authorised under the *Petroleum (Onshore) Act 1991*,

Clause 6 Riverina Highlands Regional Vegetation Management Plan 2003

Part 1 Preliminary

- (m) any clearing that consists of plantation operations within the meaning of the *Plantations and Reafforestation Act 1999* on an authorised plantation in accordance with any conditions of the authorisation and with the *Plantations and Reafforestation Code* under that Act,
- (n) any clearing that involves the removal or lopping of any tree or other vegetation in accordance with section 88 of the *Roads Act 1993*,
- (o) any clearing carried out in accordance with a consent under Division 3 of Part 9 of the *Roads Act 1993*,
- (p) any clearing carried out in accordance with a permit under Part 3A of the *Rivers and Foreshores Improvement Act 1948*,
- (q) any clearing carried out in accordance with a licence, permit, authority or approval under the *Water Act 1912*.

Riverina Highlands Regional Vegetation Management Plan 2003

Clause 7

Principles and objectives

Part 2

Part 2 Principles and objectives

7 Aim of Part 2

The aim of this Part is to declare principles and objectives that are required by Part 3 to be taken into consideration by the consent authority before granting consent for clearing.

8 Guiding principles

The guiding principles for the region are as follows:

- (a) that biodiversity within the region be maintained,
- (b) that native vegetation with high conservation value be protected and conserved,
- (c) that regional protected land—steep and erodible land be protected from land degradation,
- (d) that clearing contribute to the achievement of targets that will not result in a net loss in the types of native vegetation within the region and will achieve a net gain in native vegetation of the types that were depleted in the region at the commencement of this plan,
- (e) that riparian vegetation and regional streamsides within all regional protected land be protected,
- (f) that cultural heritage values be protected,
- (g) that water catchments be protected from salinity impacts in accordance with the principles of ecologically sustainable development within the meaning of the *Protection of the Environment Administration Act 1991*,
- (h) that recommendations made by, and any courses of action set out in, recovery plans and draft recovery plans (within the meaning of the *Threatened Species Conservation Act 1995*) be adhered to,
- (i) that recommendations in Schedule 1 for species be adhered to for the purpose of avoiding or reducing threats described in that Schedule for those species on land identified in that Schedule as primary habitat of those species,
- (j) that biolinks be conserved, managed and enhanced.

Clause 9 Riverina Highlands Regional Vegetation Management Plan 2003

Part 2 Principles and objectives

9 Primary objectives

- (1) The primary objectives of this plan for regional protected land—steep and erodible land are:
 - (a) to provide for the retention, protection, management and restoration of native vegetation in areas that are prone to erosion, and
 - (b) to mitigate and to prevent further land degradation.
- (2) The primary objectives of this plan for regional protected land—streamsides are:
 - (a) to provide for the conservation, management and rehabilitation of native vegetation on the land, and
 - (b) to mitigate and enhance water quality and riparian habitat values.
- (3) The primary objective of this plan for land within a regional linear reserve is to provide for the conservation, management and rehabilitation of native vegetation on the land so as:
 - (a) to provide corridors for the dispersal of flora and fauna and to link gene pools, and
 - (b) to conserve vegetation, particularly that cleared from other land within the region.
- (4) The primary objective of this plan for unclassified land is to provide for the conservation, management and enhancement of native vegetation on private property.

10 Biodiversity principles

- (1) The following principles are intended to maximise achievement of biodiversity within the region and to result in no net loss of biodiversity within the region:
 - (a) Retention of native vegetation is always preferable to clearing.
 - (b) The amount of clearing should be minimised.
 - (c) Clearing is to be undertaken in a manner that minimises harm and mitigates impact on native vegetation and associated wildlife.

Riverina Highlands Regional Vegetation Management Plan 2003

Clause 10

Principles and objectives

Part 2

-
- (d) Any clearing of native vegetation carried out after retention is maximised, harm minimised and impacts mitigated, is to be compensated, in accordance with the offset principles described in subclause (2) and the Department of Land and Water Conservation's publication *Guidelines: How to Minimise the Environmental Impacts of Clearing*.
- (2) The *offset principles* are as follows:
- (a) Offsets must aim for long-term equilibrium that results in an environment of equal value to (or greater value than) that lost, with respect to the full range of floristic, structural and functional issues.
 - (b) Ratios applied in calculating offsets must be proportional to the immediate loss of biodiversity and of ecosystem function, and to the need to guarantee long-term survival.
 - (c) Compensation afforded by an offset should be as close as possible to the loss both in proximity and landscape function, while maximising restoration priorities.
 - (d) Offset values should be regionally-based to take account of climatic and geographical influences.
 - (e) The continuation of any offset should be guaranteed in perpetuity.
 - (f) The management of an offset should be guaranteed in perpetuity.
 - (g) Regeneration is always preferable to re-planting as an offset.

Note. The publication *Guidelines: How to Minimise the Environmental Impacts of Clearing* may be updated by the Department of Land and Water Conservation. It documents appropriate offset procedures that implement the offset principles.

Clause 11 Riverina Highlands Regional Vegetation Management Plan 2003

Part 3 Clearing controls

Part 3 Clearing controls

11 Does clearing require development consent?

- (1) Clearing of regional protected land, and clearing of native vegetation on other land to which this plan applies, may be carried out only with development consent, except as provided by subclause (2).
- (2) Clearing of regional protected land, and clearing of native vegetation on other land to which this plan applies, may be carried out without development consent if it is clearing of a kind specified for the land under the heading “Allowed without development consent” in the Table in Schedule 2.
- (3) Consent must not be granted for clearing of regional protected land, or for clearing of native vegetation on other land to which this plan applies, if it is clearing of a kind specified for the land under the heading “Not allowed by this plan” in the Table in Schedule 2.

Note 1. Section 109B of the *Environmental Planning and Assessment Act 1979* (saving of effect of existing consents) provides that nothing in an environmental planning instrument prohibits, or requires a further development consent to authorise, the carrying out of development in accordance with a consent that has been granted and is in force, for example, a consent required by a regional vegetation management plan under the *Native Vegetation Conservation Act 1997* (that has been granted under the *Environmental Planning and Assessment Act 1979* and is in force).

Note 2. The Table in Schedule 2 lists, for all of the land to which this plan applies:

- (a) the clearing that may be carried out without development consent, and
- (b) the clearing that may be carried out only after development consent is obtained, and
- (c) the clearing that is not allowed by this plan.

12 Restrictions on certain clearing without consent

Clearing of any kind described in Schedule 4 must not be carried out without consent if there is a consent for clearing in force for the land. However, this requirement does not apply to public utility clearing, as described in Schedule 4.

13 Restrictions on granting consent

- (1) Before granting consent for the clearing of regional protected land or the clearing of native vegetation on other land, the consent authority must:

Riverina Highlands Regional Vegetation Management Plan 2003

Clause 13

Clearing controls

Part 3

-
- (a) take into consideration the guiding principles for the region as set out in clause 8 and be satisfied that the clearing will be consistent with those principles, and
 - (b) take into consideration the primary objectives of this plan for that land as set out in clause 9 and be satisfied that the clearing will be consistent with achieving those objectives, and
 - (c) take into consideration the principles intended to maximise achievement of biodiversity within the region as set out in clause 10, and
 - (d) take into consideration the following:
 - (i) cumulative impacts from the method of clearing and associated disturbance,
 - (ii) proposed management practices for the subject land,
 - (iii) any offsets that are proposed for the clearing to achieve no net loss in accordance with the Department of Land and Water Conservation's publication *Guidelines: How to Minimise the Environmental Impacts of Clearing*,
 - (iv) any property vegetation plans prepared for any adjoining or adjacent land,
 - (v) the results of any analysis of development consents already granted for clearing of or on any such land,
 - (vi) likely impacts on any wetlands and salinity,
 - (vii) likely visual impacts.

Note. Section 79C (1) (b) of the *Environmental Planning and Assessment Act 1979* requires a consent authority to take into consideration all likely impacts of proposed development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.

- (2) The consent authority must also have regard to a property vegetation plan for the property that would be affected by the proposed clearing, and such other surveys and reports as the consent authority may consider appropriate, before granting consent:
 - (a) for any clearing that will involve more than 1 hectare of land, or
 - (b) for the clearing of any native vegetation that the consent authority is satisfied is of high conservation value, as defined in Schedule 3, whether or not on regional protected land.
- (3) If the land to which the development application relates consists of or includes, or is likely to consist of or include, a significant indigenous cultural site, the consent authority must:

Clause 13 Riverina Highlands Regional Vegetation Management Plan 2003

Part 3 Clearing controls

- (a) notify the Wiradjuri Council of Elders about the proposal, and
- (b) not grant consent before considering any comments made to the consent authority by that Council within 21 days of the date of notification.

14 Content of property vegetation plan

A property vegetation plan must comply with guidelines issued by the consent authority and include a map showing the following:

- (a) the boundaries of the property to which it relates,
- (b) the distribution of native vegetation on the property (including native vegetation communities, and any high conservation native vegetation and planted native vegetation),
- (c) any regional protected land,
- (d) areas proposed for clearing,
- (e) any conservation areas, being areas proposed for the conservation management of native vegetation,
- (f) any retention areas, being areas with native vegetation that are not proposed to be conservation areas or for clearing,
- (g) any revegetation areas, being areas that are proposed to be revegetated with native vegetation.

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Schedule 1 Recommendations for certain species

(Clause 8 (i))

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Birds			
Powerful Owl <i>Ninox strenua</i>	Ecotone between closed and open forests	<ul style="list-style-type: none"> Reduction of prey numbers and loss of nesting sites through loss of hollow-bearing trees Clearing, degradation and fragmentation of forest habitat 	<ul style="list-style-type: none"> Retain large stands of native vegetation, especially those containing hollow-bearing trees that provide nesting sites Protect creek-side vegetation to protect roosting areas Retain an undisturbed buffer of native vegetation with a radius of at least 200 metres around known nest sites
Barking Owl <i>Ninox connivens</i>	Riparian, lower forest and woodland remnants	<ul style="list-style-type: none"> Clearing of woodland vegetation, particularly large hollow-bearing trees, for agriculture and firewood harvesting Frequent fire that leads to degradation of under-storey vegetation which is critical as habitat and foraging substrate for its prey 	<ul style="list-style-type: none"> Retain existing woodland and open forest remnant stands, especially those containing hollow-bearing trees that provide nesting sites Retain vegetation along watercourses to protect roosting areas Retain a buffer of native vegetation with a radius of at least 200 metres around known nest sites

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Masked Owl <i>Tyto novaehollandiae</i>	Forests	<ul style="list-style-type: none"> Reduction of prey numbers and loss of nesting sites through loss of hollow-bearing trees 	<ul style="list-style-type: none"> Retain large stands of native vegetation, especially those containing hollow-bearing trees that provide nesting sites Retain a buffer of native vegetation with a radius of at least 200 metres around known nest sites
Bush Stone-Curlew <i>Burhinus grallarius</i>	Open grassy woodlands	<ul style="list-style-type: none"> Clearing, degradation and fragmentation of grassy woodland habitat Loss of under-storey habitat (eg native grasses, leaf litter, coarse woody debris) through grazing, burning, weed invasion Foxes and cats 	<ul style="list-style-type: none"> Retain existing vegetation along roadsides, in paddocks and in remnant stands Fence suitable woodland habitats, particularly those with unimproved pasture and an intact native ground plant layer Encourage good grazing management within remnants so as to maintain species diversity while limiting grass height. Some limited tree regeneration is appropriate Encourage landholders to increase the size of existing woodland remnants, to plant trees and to establish buffer zones of unimproved uncultivated pasture around woodland remnants

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
			<ul style="list-style-type: none"> • Limit firewood collection • Encourage landholders to leave fallen branches and debris on the ground beneath trees • Control foxes, particularly during breeding (November–January)
Olive Whistler <i>Pachycephala olivacea</i>	Moist forest (well reserved)—may be expanding with plantations	<ul style="list-style-type: none"> • Loss of fragmentation of moist forest/gully vegetation 	<ul style="list-style-type: none"> • Retain areas with suitable habitat
Painted Honeyeater <i>Grantiella picta</i>	Foothill migrants—associated with mistletoe in woodlands and dry forest, including Box-Ironbark and River Oak	<ul style="list-style-type: none"> • Clearing and degradation of open forests and grassy woodland habitat 	<ul style="list-style-type: none"> • Retain suitable foraging and nesting trees, including trees that host mistletoe • Encourage regeneration of habitat by fencing remnant stands
Black-chinned Honeyeater <i>Melithreptus gularis gularis</i>	Ironbark communities; lower slopes Yellowbox/Whitebox Woodlands and River Red Gum	<ul style="list-style-type: none"> • Clearing, degradation and fragmentation of grassy woodland habitat • Degradation of grassy woodland habitat through activities such as heavy grazing and firewood collection 	<ul style="list-style-type: none"> • Retain stands of suitable open Box-Ironbark forest or woodland habitat • Encourage regeneration of feed/nesting trees by fencing remnant stands and new plantings • Retain and enhance riparian corridors • Identify areas where the species occurs regularly, and areas used occasionally as refuges

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Brown Treecreeper <i>Climacteris picumnus vitoriae</i>	Open grassy woodlands	<ul style="list-style-type: none"> • Clearing, degradation and fragmentation of grassy woodland habitat • Loss of under-storey habitat (eg native grasses, leaf litter, coarse woody debris) through grazing, burning, weed invasion • Loss of hollow-bearing trees that provide nesting sites 	<ul style="list-style-type: none"> • Retain existing woodland and open forest remnant stands, especially those containing hollow-bearing trees that provide nesting sites • Fence suitable woodland habitats, particularly those with unimproved pasture and an intact native ground plant layer • Encourage good grazing management within remnants which will maintain species diversity while limiting grass height. Some limited tree regeneration is appropriate • Encourage landholders to increase the size of existing woodland remnants, to plant trees and to establish buffer zones of unimproved uncultivated pasture around woodland remnants • Retain and enhance riparian corridors • Limit firewood collection • Encourage landholders to leave fallen branches and debris on the ground beneath trees

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Diamond Firetail <i>Stagonopleura guttata</i>	Grassy forests and woodlands	<ul style="list-style-type: none"> • Clearing and degradation of open forests and grassy woodland habitat 	<ul style="list-style-type: none"> • Retain and enhance stands of suitable open forest or open woodland with patches of shrubs within the remnant or nearby for nesting • Encourage landholders to increase the size of existing woodland remnants, to plant trees and to establish buffer zones of unimproved uncultivated pasture around woodland remnants • Identify areas where the species occurs regularly, and areas used occasionally (the species is a seed feeder)

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Grey-crowned Babbler <i>Pomatostomus temporalis</i>	Grassy forests and woodlands with mature trees, some regeneration tall shrubs and an intact ground layer	• Clearing and degradation of open forests and grassy woodland habitat	<ul style="list-style-type: none"> • Retain and enhance stands of suitable open Box-Ironbark forest or woodland habitat • Maintain and enhance some tall shrubs and a multi-aged woodland • Fence suitable woodland habitats • Encourage good grazing management within remnants so as to maintain species diversity • Encourage regeneration of trees and scrub adjoining and between grey-crowned babbler colonies • Maintain large trees and logs on the ground • Identify areas where the species occurs regularly

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Hooded Robin <i>Melanodryas cucullate cucullate</i>	Grassy forests and woodlands with a mix of bare ground, groundcover and litter	<ul style="list-style-type: none"> • Clearing, degradation and fragmentation of grassy woodland habitat • Loss of under-storey habitat (eg native grasses, leaf litter, coarse woody debris) through grazing, burning, weed invasion • Foxes and cats 	<ul style="list-style-type: none"> • Retain and enhance stands of suitable open forest or woodland habitat, particularly of 100 hectares or more • Fence suitable woodland habitats • Encourage good grazing and other management within remnants so as to maintain and enhance species and structural diversity • Encourage landholders to increase the size of existing remnants, to plant trees and to establish buffer zones of unimproved uncultivated pasture around woodland remnants • Limit firewood collection • Encourage landholders to leave fallen branches and debris on the ground beneath trees

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Speckled Warbler <i>Pyrrholaemus sagittate</i>	Grassy forests and woodlands	<ul style="list-style-type: none"> • Clearing, degradation and fragmentation of grassy woodland habitat • Loss of under-storey habitat (eg native grasses, leaf litter, coarse woody debris) through grazing, burning, weed invasion • Foxes and cats 	<ul style="list-style-type: none"> • Retain existing vegetation along roadsides, in paddocks and in remnant stands • Fence suitable woodland habitats, particularly those with unimproved pasture and an intact native ground plant layer • Encourage good grazing management within remnants so as to maintain species diversity • Encourage the inclusion of tall shrubs such as wattles which degrade to form complex stick structures on the ground • Encourage landholders to increase the size of existing remnants, to plant trees and to establish buffer zones of unimproved uncultivated pasture around woodland remnants • Limit firewood collection • Encourage landholders to leave fallen branches and debris on the ground beneath trees

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Regent Honeyeater <i>Xanthomyza phrygia</i>	Ironbark communities; lower slopes Yellowbox/ Whitebox Woodlands and River Oak	<ul style="list-style-type: none"> • Clearing, degradation and fragmentation of habitat, in particular, logging of larger, mature trees in Box-Ironbark forests that provide reliable nectar and nesting sites • Poor regeneration of suitable foraging and nesting sites 	<ul style="list-style-type: none"> • Ensure some dense groundcover is maintained (the species is a ground nester) • Control foxes, particularly during breeding (August–January) • Retain and enhance stands of suitable open Box-Ironbark forest or woodland habitat • Encourage regeneration of feed/nesting trees by fencing remnant stands and new plantings • Encourage the planting of winter flowering ornamental eucalypts in towns and gardens in its range • Identify areas where the species occurs regularly, and those areas used occasionally as refuges. These include the Box-Ironbark forests of the region bounded by Tarcutta, Tumblong, Ellerslie, Humula and Kyeamba, especially the Tarcutta Hills

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Swift Parrot <i>Lathamus discolor</i>	Winter migrant communities that feature winter flowering eucalypts; Ironbark communities; lower slopes Yellowbox/Whitebox Woodlands and River Oak	<ul style="list-style-type: none"> • Clearing, degradation and fragmentation of habitat, in particular, logging of larger, mature trees in Box-Ironbark forests that provide reliable nectar sites 	<ul style="list-style-type: none"> • Identify areas where the species occurs regularly, and those areas used occasionally as refuges • Retain and enhance stands of suitable open Box-Ironbark forest or woodland habitat, including along roadsides and remnant stands in agricultural areas
Turquoise Parrot <i>Neophema pulchella</i>	Grassy forests and woodlands	<ul style="list-style-type: none"> • Clearing of grassy woodland habitat • Degradation of grassy woodland habitat through activities such as heavy grazing and firewood collection • Illegal trapping of birds, which also often results in destruction of hollows • Predation by foxes and cats • Kills that occur when parrots feed on grain spilt onto roads 	<ul style="list-style-type: none"> • Retain existing grassy woodland vegetation • Maintain and enhance open structure of grassy woodlands (the species is a seed feeder) • Limit habitat degradation by fencing remnant stands and managing grazing pressure • Encourage regeneration of habitat by fencing remnant stands and new plantings • Implement fox and cat control programs

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Superb Parrot <i>Polytelis swainsonii</i>	Woodlands across south-west slopes dominated by Blakely's Red Gum and Yellow Box	<ul style="list-style-type: none"> • Clearing of hollow-bearing nest trees • Clearing and degradation of feeding areas • Poor regeneration of nesting trees and food resources • Mass kills that occur when parrots feed on spilt grain on roads • Illegal trapping of birds, which also often results in destruction of hollows 	<ul style="list-style-type: none"> • Retain remnant vegetation, especially within 10 kilometres of nest sites • Retain mature hollow-bearing trees along roadsides, paddocks and remnant stands • Encourage regeneration of nesting and feed trees by fencing remnant stands and new plantings, and managing grazing pressure
Blue Billed Duck <i>Oxyura australis</i>	Large permanent wetlands and swamps; nests in Cumbungi or similar	<ul style="list-style-type: none"> • Potential threats include disruption to natural hydrological regimes, loss of habitat, clearing and grazing of Cumbungi, illegal hunting 	<ul style="list-style-type: none"> • Restore natural hydrological regimes • Protect breeding habitat
Square-tailed Kite <i>Lophoictinia isura</i>	Open forests and woodlands; stick nests near gullies	<ul style="list-style-type: none"> • Clearing of woodland habitat • Degradation of open forest and woodland habitat through activities such as heavy grazing and firewood collection 	<ul style="list-style-type: none"> • Retain existing open forests and woodland vegetation • Limit habitat degradation by fencing remnant stands and managing grazing pressure • Encourage regeneration of habitat by fencing remnant stands and new plantings

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Pink Robin <i>Petroica rodingaster</i>	Wet forests (breeding range) and all forest types (non-breeding)	<ul style="list-style-type: none"> Clearing of habitat, particularly near creeks and/or gullies has greatly reduced the availability of suitable forests and woodland 	<ul style="list-style-type: none"> Protect forest and woodland habitat, particularly dense gully and creek-side vegetation Protect forest and woodland habitat normally utilised by the species outside the breeding season
Mammals			
Broad toothed Rat <i>Mastacomys fuscus</i>	Wet heathlands, mainly in sub-alpine regions but also at lower elevation; these habitats are well reserved within the Riverina Highlands region	<ul style="list-style-type: none"> Clearing and/or fragmentation of preferred habitat Global warming leading to lack of snow cover during the winter Predation from feral dogs, foxes and cats 	<ul style="list-style-type: none"> Protect habitat Control foxes
Brush-tailed Phascogale <i>Phascogale tapoatafa</i>	Box-Ironbark woodlands and forests; nests in hollow-bearing trees	<ul style="list-style-type: none"> Clearing and/or fragmentation of preferred habitat Loss of fallen trees on the forest floor due to inappropriate firewood collection Loss of hollow-bearing trees Predation from feral foxes, dogs and cats 	<ul style="list-style-type: none"> Maintain healthy ecosystems, particularly with a range of shrubs (size and species) and on areas of dissected topography Implement appropriate fox and feral dog control

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Koala <i>Phascolarctos cinereus</i>	Variety of forest and woodland types, though mainly in fertile valley floors and plains	<ul style="list-style-type: none"> • Clearing and/or fragmentation of preferred habitat • Predation from feral dogs and foxes • Road-kill caused by vehicular traffic 	<ul style="list-style-type: none"> • Retain and enhance suitable habitat and feed trees • Identify presence and core and potential koala habitat • Retain, revegetate and maintain vegetation corridors between feeding areas • Implement fox and feral dog control
Squirrel Glider <i>Petaurus norfolcensis</i>	Box-Ironbark woodlands and forests; River Red Gum woodlands; hollow-bearing trees	<ul style="list-style-type: none"> • Clearing and/or fragmentation of preferred habitat • Loss of hollow-bearing trees • Reduction of preferred under-storey plants due to grazing and/or inappropriate use of fire • Predation from feral foxes, dogs and cats 	<ul style="list-style-type: none"> • Protect good habitat remnants, especially roadsides in Box country, the riparian zone with silver wattle and Box-Ironbark forests • Fox and feral dog control
Tiger Quoll <i>Dasyurus maculatus</i>	Variety of forest and woodland types, wherever there is suitable prey sources; shelters in complex rocky outcrops and in hollows of large fallen trees	<ul style="list-style-type: none"> • Competition with feral foxes and cats for preferred prey items • Loss of preferred den sites • Adverse changes in the relative availability of preferred prey sources • Road-kill caused by vehicular traffic • Poisoning during 1080-baiting campaigns carried out for feral dogs and foxes 	<ul style="list-style-type: none"> • Identify its presence and core habitats, especially areas of thick under-storey, hollow logs and rocky outcrops. Then undertake steps that mitigate against threats to these areas • Impose appropriate fox and feral dog controls

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Yellow-bellied Glider <i>Petaurus australis</i>	Variety of forest types, though mainly in fertile drainage lines; nests in hollow-bearing trees	<ul style="list-style-type: none"> • Clearing and/or fragmentation of preferred habitat • Changes in forest over-storey structure leading to loss of hollow-bearing trees, which provide essential shelter 	<ul style="list-style-type: none"> • Identify presence and core habitats. Then undertake steps that mitigate against threats • Plan forestry activities in a way that retains key shelter (such as protection of hollow-bearing trees, v-notched feed trees and surrounds)
Common Bent-wing Bat <i>Miniopterus schreibersii</i>	Forages in a variety of forest and woodland types; roosts in caves	<ul style="list-style-type: none"> • Clearing and/or fragmentation of preferred foraging habitat • Inadvertent destruction of cave roost sites • Inappropriate activities in the vicinity of roost caves, causing disruption of normal behaviour 	<ul style="list-style-type: none"> • Identify presence, breeding sites and core habitats. Then undertake steps that mitigate against threats such as damage to roost caves and surrounds
Greater Broad-nosed Bat <i>Scoteanax ruppellii</i>	Variety of forest and woodland types; predominantly coastal distribution (eastern New South Wales), at lower altitude in area; roosts primarily in tree hollows	<ul style="list-style-type: none"> • Clearing and/or fragmentation of preferred foraging habitat • Changes in forest over-storey structure resulting in loss of hollow-bearing trees, which provide essential shelter 	<ul style="list-style-type: none"> • Retain and enhance stands of suitable open Box-Ironbark forest or woodland habitat containing hollow-bearing trees

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Reptiles			
Little Whip Snake <i>Suta flagellum</i>	Natural grassland/grassy woodland; rocky/grassy slopes and flats; groundcover dependent, particularly rock and timber shelter sites in a natural grassy cover	<ul style="list-style-type: none"> • Loss of under-storey/ ground layer habitat • Rock removal 	<ul style="list-style-type: none"> • Retain and enhance rocky grassy woodlands with fallen timber on the ground
Pink-tailed Worm Lizard <i>Aprasia parapulchella</i>	Natural grassland/grassy woodland; rocky/grassy slopes; cryptic; groundcover dependent, particularly surface rock in Kangaroo Grass <i>Themeda triandra</i>	<ul style="list-style-type: none"> • Loss of under-storey/ ground layer habitat • Rock removal 	<ul style="list-style-type: none"> • Retain and enhance rocky grassy woodlands with fallen timber on the ground • Survey proposed development within natural rocky grasslands and other potential habitat • Make a comprehensive assessment of proposed development or activities within natural grassland and other potential habitat • Implement management guidelines on off-reserve land which supports <i>A. parapulchella</i>

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Striped Legless Lizard <i>Delma impar</i>	Rocky/grassy slopes; groundcover dependent	<ul style="list-style-type: none"> • Loss of under-storey/ ground layer habitat • Habitat fragmentation • Overgrazing or replacement of native grasses. • Stock camps associated with rocky outcrops • Rock removal 	<ul style="list-style-type: none"> • Retain and enhance rocky grassy woodlands with fallen timber on the ground • Survey proposed development or activities within natural grassland and other potential habitat • Make a comprehensive assessment of proposed development or activities within natural grassland and other potential habitat • Implement management guidelines on off-reserve land which supports <i>D. impar</i>
Invertebrates			
Golden Sun Moth <i>Synemon plana</i>	Natural grassland/grassy woodland; groundcover dependent, requiring natural pastures dominated by wallaby grasses (<i>Austrodanthonia</i> spp.)	<ul style="list-style-type: none"> • Loss of under-storey/ ground layer habitat 	<ul style="list-style-type: none"> • Survey proposed development or activities within natural grassland and other potential habitat • Make a comprehensive assessment of proposed development or activities within natural grassland and other potential habitat • Implement management guidelines on off-reserve land which supports <i>S. plana</i>

Riverina Highlands Regional Vegetation Management Plan 2003

Recommendations for certain species

Schedule 1

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Frogs			
Northern Corroboree Frog <i>Pseudophryne pengilleyi</i>	Grassy bogs and soaks above 900 metres above sea level; nearly all populations are on State Forest and Kosciuszko National Park	<ul style="list-style-type: none"> • Potential threats include disruption to natural hydrological regimes, loss of habitat, disease • Disturbance to breeding sites by feral animals • Blackberry infestations 	<ul style="list-style-type: none"> • Protect breeding sites and surrounding vegetation • Protect breeding sites from siltation or drainage and blackberry infestations • Monitor known sites
Booroolong Frog <i>Litoria booroolongensis</i>	Rocky flowing mountain streams	<ul style="list-style-type: none"> • Potential threats include disruption to natural hydrological regimes, loss of habitat, disease and predation by introduced fish and terrestrial predators 	<ul style="list-style-type: none"> • Protect vegetation along mountain streams and restore natural flows
Southern Bell Frog <i>Litoria raniformis</i>	Permanent water/billabongs	<ul style="list-style-type: none"> • Potential threats include disruption to natural hydrological regimes, loss of habitat, disease and predation by introduced fish and terrestrial predators 	<ul style="list-style-type: none"> • Protect breeding sites, especially vegetation around pools and restoring natural flows
Plants			
Yass Daisy <i>Ammobium craspedioides</i>	Localised in high numbers; grassy woodlands	<ul style="list-style-type: none"> • Ploughing and pasture improvement • Changes in land use from rough grazing to more intensive agriculture or plantations 	<ul style="list-style-type: none"> • Locate populations and protect from major land-use changes, such as ploughing and pasture improvement

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 1 Recommendations for certain species

Threatened species (common name/ scientific name)	Primary habitat	Threats to habitat/species	Recommendations
Austral Pillwort <i>Pilularia novae hollandiae</i>	Shallow swamps, waterways and road table drains	<ul style="list-style-type: none"> • Drainage of wet areas 	<ul style="list-style-type: none"> • Locate populations, identify threats (particularly disruption to drainage) and protect
Cotoneaster Pomaderris <i>Pomaderris cotoneaster</i>	Localised dry, shrubby open forests above or alongside rivers	<ul style="list-style-type: none"> • Clearing and perhaps frequent fires 	<ul style="list-style-type: none"> • Locate populations, identify threats and protect from clearing
Phantom Wattle <i>Acacia phasmoides</i>	Localised; Woomargama/ Talmalmo	<ul style="list-style-type: none"> • Clearing, heavy grazing and too frequent fires 	<ul style="list-style-type: none"> • Locate populations, and protect from clearing and other adverse development and activities
Woolly Ragwort <i>Senecio garlandii</i>	Sheltered pockets near rocky ridges especially Benambra, Yambla Range	<ul style="list-style-type: none"> • Clearing, heavy grazing and too frequent fires 	<ul style="list-style-type: none"> • Locate populations, and protect from clearing, heavy grazing, too frequent fires and other adverse development and activities
Tumut Grevillea <i>Grevillea wilkinsonii</i>	Localised; in the Goobarragandra Valley	<ul style="list-style-type: none"> • Grazing, weeds, competition from other natives and fire 	<ul style="list-style-type: none"> • No further clearing or grazing • Manage weeds and competition • Exclude fire from populations

Riverina Highlands Regional Vegetation Management Plan 2003

Clearing control table

Schedule 2

Schedule 2 Clearing control table

(Clause 11)

Regional protected land—steep and erodible land

1 Allowed without development consent

Clearing of regional protected land involved in carrying out any of the following as defined in Schedule 4 and subject to any relevant conditions imposed in that Schedule:

- (a) maintenance of fence lines on regional protected land,
- (b) eucalyptus leaf cutting,
- (c) horticultural harvesting or pruning,
- (d) indigenous cultural practices,
- (e) minimal tree cutting,
- (f) noxious weed eradication,
- (g) public utility clearing,
- (h) regrowth removal (2 hectare maximum),
- (i) stock fodder provision.

2 Allowed after development consent is obtained

Any clearing of regional protected land not included in item 1 or 3.

3 Not allowed by this plan

- (1) Clearing, on any property in any one calendar year, of a total of more than 2 hectares of grassy white box woodland in good condition (as defined below), excluding any clearing allowed by item 1.
- (2) Clearing of any regional protected land within sites of threatened flora or ecological communities, being sites identified in recovery plans approved under Part 4 of the *Threatened Species Conservation Act 1995*, if not included in item 1.

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 2 Clearing control table

Regional protected land—streamsides**1 Allowed without development consent**

Clearing of regional protected land involved in carrying out any of the following as defined in Schedule 4 and subject to any relevant conditions imposed in that Schedule:

- (a) beneficial conservation management,
- (b) indigenous cultural practices,
- (c) noxious weed eradication,
- (d) public utility clearing,
- (e) maintenance of fence lines on regional protected land.

2 Allowed after development consent is obtained

- (1) Clearing from regional protected land of exotic vegetation, if not included in item 1.
- (2) Clearing from regional protected land of standing dead timber, if not included in item 1.
- (3) Clearing from regional protected land of vegetation for the construction of public utility infrastructure and rural structures on streamsides (including ramp sites, bridges and pumps), if not included in item 1.

3 Not allowed by this plan

Any clearing not included in item 1 or 2.

Land within a regional linear reserve**1 Allowed without development consent**

Clearing of native vegetation involved in carrying out any of the following as defined in Schedule 4 and subject to any relevant conditions imposed in that Schedule:

- (a) beneficial conservation management,
- (b) indigenous cultural practices,
- (c) noxious weed eradication,
- (d) pest control,
- (e) public utility clearing.

Riverina Highlands Regional Vegetation Management Plan 2003

Clearing control table

Schedule 2

2 Allowed after development consent is obtained

Any clearing of native vegetation, if not included in item 1 or 3.

3 Not allowed by this plan

- (1) Clearing, within any regional linear reserve in any one calendar year, of a total of more than 1 hectare of high conservation value native vegetation, excluding any clearing allowed by item 1.
- (2) In this item, *high conservation value native vegetation* means native vegetation that the consent authority is satisfied is of high conservation value, as defined in Schedule 3.

Unclassified land

1 Allowed without development consent

Clearing of native vegetation involved in carrying out any of the following as defined in Schedule 4 and subject to any relevant conditions imposed in that Schedule:

- (a) clearing for rural structures on unclassified land,
- (b) eucalyptus leaf cutting,
- (c) horticultural harvesting or pruning,
- (d) indigenous cultural practices,
- (e) minimal tree cutting,
- (f) noxious weed eradication,
- (g) pest control,
- (h) planted native vegetation,
- (i) private native forestry,
- (j) public utility clearing,
- (k) regrowth removal,
- (l) stock fodder provision.

2 Allowed after development consent is obtained

Any clearing of native vegetation, if not included in item 1 or 3.

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 2 Clearing control table

3 Not allowed by this plan

- (1) Except where included in item 1, clearing on any property in any one calendar year, of a total of more than 2 hectares of:
- (a) grassy white box woodland in good condition, or
 - (b) grassy yellow box woodland in good condition, or
 - (c) River Red Gum communities,
- in each case, as defined below.
- (2) Clearing of native vegetation within sites of threatened flora or ecological communities, being sites identified in recovery plans approved under Part 4 of the *Threatened Species Conservation Act 1995*.

Definitions

In this Schedule:

crown separation is calculated, for the purpose of determining whether a woody native plant is included in a patch, by reference to the crown diameter of each individual woody native plant. In determining whether a woody native plant lies within the required crown separation of the nearest woody native plant (so as to be included in the patch), the crown diameter of the more outlying of those 2 plants (that is, outlying in relation to the native woody plant that is used as a starting point) is used. The boundary of the patch is the line that:

- (a) contains the projected crowns of all the woody native plants within the patch, and
- (b) joins the outer drip line of each outermost crown of the patch with that of the nearest outermost crown of the patch.

forb means a non-woody plant other than a grass, sedge or rush.

good condition means with relatively few weeds (including pasture grasses), with mostly native ground flora (including palatable, succulent plants), and containing large (standing and fallen, living and dead) hollow-bearing trees (which feature is not applicable in determining the condition of grasslands). That is, a community which is basically self-maintaining with minimal inputs.

grassland means vegetation dominated by grasses and forbs, with less than 10% tree and shrub cover.

Riverina Highlands Regional Vegetation Management Plan 2003

Clearing control table

Schedule 2

grassy white box woodland in good condition means a remnant patch (or an area with evidence of the previous presence of a remnant patch) with an over-storey of mostly mature White Box trees and their associates (Yellow Box, Blakely's Red Gum, Apple Box, Red Stringybark), where maximum crown separation is less than two crown widths, the groundcover mainly is a rich flora of native grasses and forbs with at least 4 of the indicator high conservation value grassland species being present (see Table to Schedule 3).

Note. If White Box is absent, there must be species present that are strong evidence of its original presence.

grassy yellow box woodland in good condition means a remnant patch with an over-storey of mostly mature Yellow Box trees and their associates (White Box, Blakely's Red Gum, Apple Box, Red Stringybark, Candlebark, Snow Gum), where maximum crown separation is less than two crown widths, and the groundcover mainly is a rich flora of native grasses and forbs with at least 4 high conservation value grassland indicator species being present.

groundcover means any type of herbaceous vegetation.

patch (or ***clump***) means a group of 2 or more woody native plants, with each of those plants lying within not more than 2 crown widths of the nearest native woody plant.

River Red Gum communities means remnant patches with an over-storey of mostly mature River Red Gum trees where the average maximum crown separation is less than one crown width, and the groundcover is mainly native grasses and forbs.

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 3 Native vegetation of high conservation value

Schedule 3 Native vegetation of high conservation value

(Clause 13 (2) (b))

Native vegetation is *of high conservation value* if:

- (a) it is within a wetland of international significance, a peatland bog, a stressed or significant river or a rare or threatened Australian plants site, or
- (b) it is a community of a depleted vegetation type (such as a broad vegetation type, or native vegetation in a grassland, wetland or sphagnum bog), being a type of which not more than 30% of the pre-1750 range has been retained, or
- (c) it is of a naturally rare or restricted vegetation type:
 - (i) of which less than 15% of the total in the region is within areas within the region reserved or dedicated under the *National Parks and Wildlife Act 1974* or otherwise effectively protected, or
 - (ii) that is not well represented in the region, or
- (d) it is identified in Schedule 1 as primary habitat for a threatened species of birds, mammals, reptiles, invertebrates, frogs or plants identified in that Schedule, the conservation of which species is mainly dependent on private land, or
- (e) it is within a biolink that is a critical link or corridor at a regional level, or an important link between large areas of different habitats or vegetation types, or it is a large block of native vegetation in a largely cleared landscape, or
- (f) it is in a riparian corridor or wetland, including a sphagnum bog, or
- (g) it comprises or is part of a grassland or grassy ecosystem that meets any of the criteria in items 1–3 of the Table to this Schedule within a one hectare unit, or
- (h) it has significant quality because the native vegetation is on a site in good condition with few weeds, mostly native ground flora and large hollow-bearing living or dead (standing or fallen) trees, particularly where the native vegetation communities are in good condition, or

Riverina Highlands Regional Vegetation Management Plan 2003

Native vegetation of high conservation value

Schedule 3

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- (i) it is significantly viable because the native vegetation is on a resilient site or a site with high potential for restoration, whether or not only after minor changes to management, for example, of grazing regimes, or
 - (j) it is of cultural heritage significance because the native vegetation:
 - (i) is on a site of cultural heritage significance to the Wiradjuri or Walgalu people, such as a site that is listed, or has potential for being listed, for that reason on the National Parks and Wildlife Service's Aboriginal Heritage Information System, or
 - (ii) is included in paragraph (c) (i) or (ii) and is of high cultural significance to the Wiradjuri or Walgalu people, or
 - (k) it is within a part of a regional linear reserve:
 - (i) that is mapped and assessed as having a high conservation value in a current plan of management, or
 - (ii) that is not mapped or not so assessed in a current plan of management, and has not been excluded from being so mapped or assessed on the ground that it does not have high conservation value.

Table

Criteria	Species relevant to whether grassland or grassy ecosystem is of high conservation value
1 Native vegetation that contains one or more of: <ul style="list-style-type: none"> (a) the plant species, populations or ecological communities listed in Schedule 1, 2 or 3 to the <i>Threatened Species Conservation Act 1995</i>, or (b) the plant species listed in the <i>Rare or Threatened Australian Plants (ROTAP) List</i> (Briggs and Leigh 1995). 	

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 3 Native vegetation of high conservation value

Criteria	Species relevant to whether grassland or grassy ecosystem is of high conservation value
2 Native vegetation that contains four or more of the species listed opposite.	Austral Bugle (<i>Ajuga australis</i>) Billy Buttons (<i>Craspedia variabilis</i>) Blue Devil (<i>Eryngium rostratum</i>) Blue Heron's-bill (<i>Erodium crinitum</i>) Blue Pincushion (<i>Brunonia australis</i>) Buttercups (<i>Ranunculus</i> spp.) Button Everlasting (<i>Helichrysum scorpioides</i>) Chamomile Burr-daisy (<i>Calotis anthemoides</i>) Chamomile Sunray (<i>Rhodanthe anthemoides</i>) Chocolate Lilies (<i>Dichopogon</i> spp.) Common and Clumped Everlastings (<i>Chrysocephalum</i> spp.) Finger Flower (<i>Cheiranthra cyanea</i>) Fringed Lilies (<i>Thysanotus</i> spp.) Golden Moth Orchid (<i>Diuris chryseopsis</i>) and all other orchids Grass Trigger Plants (<i>Stylidium graminifolium</i>) Hairy Buttons (<i>Leptorhynchus elongatus</i>) Leafy Daisy (<i>Brachyscome rigidula</i>) and other <i>Brachyscome</i> spp. Lemon Beautyheads (<i>Calocephalus citreus</i>) Milkmaids (<i>Burchardia umbellata</i>) Milkwort (<i>Polygala japonica</i>) Native Flax (<i>Linum marginale</i>) Native Yam or Murnong (<i>Microseris lanceolata</i>) Purple Violet (<i>Viola betonicifolia</i>) Spur Velleia (<i>Velleia paradoxa</i>) Sticky Everlasting (<i>Bracteantha viscosa</i>) Vanilla Lilies (<i>Arthropodium</i> spp.) Yellow Burr-daisy (<i>Calotis lappulacea</i>)

Riverina Highlands Regional Vegetation Management Plan 2003

Native vegetation of high conservation value

Schedule 3

Criteria	Species relevant to whether grassland or grassy ecosystem is of high conservation value
3 Native vegetation that contains: <ul style="list-style-type: none"> (a) six or more of the species listed opposite, or (b) a total of six or more species that include one or more of the species listed opposite and one or more of the species listed in item 2. 	<ul style="list-style-type: none"> Blue Bells (<i>Wahlenbergia</i> spp.) Bulbine Lily (<i>Bulbine bulbinoopsis</i>) Common Woodruff (<i>Asperula conferta</i>) Curved Rice-flower (<i>Pimelea curviflora</i>) Flax Lilies (<i>Dianella</i> spp.) Ivy Goodenia (<i>Goodenia hederacea</i>) Mat-rush (<i>Lomandra</i> spp.) Pale Sundew (<i>Drosera peltata</i>) Scaly Buttons (<i>Leptorhynchos squamatus</i>) Scrambled Eggs (<i>Goodenia pinnatifida</i>) Swamp Raspwort (<i>Haloragis heterophylla</i>) Vanilla Glycine (<i>Glycine tabacina</i>) Variable Plantain (<i>Plantago varia</i>) Yellow Rush-lily (<i>Tricoryne elatior</i>)

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 4 Descriptions of exemptions

Schedule 4 Descriptions of exemptions

(Clause 12 and Schedule 2)

1 Beneficial conservation management

Management activities undertaken on land to ensure the maintenance and enhancement of the conservation values of the site, but limited to periodic grazing for grassland management, burning, weed removal and restoration of native ecosystems (in each case, in accordance with the *Beneficial Conservation Management Exemption Guidelines for Riverina Highlands* obtainable from the Department of Land and Water Conservation).

2 Maintenance of fence lines on regional protected land

- (1) The clearing of regional protected land for the maintenance of fence lines.
- (2) Any tree that is affected must have a diameter at breast height, within the meaning of the *Plantations and Reafforestation (Code) Regulation 2001*, of less than 50 centimetres, and be not more than ten metres from either side of the fence line.

Note. That Regulation states that "diameter at breast height" means the measurement of the diameter of a tree made:

- (a) at a height of 1.3 metres above ground level (measured from the ground level of the up slope side of the tree if the tree is on a slope), and
- (b) at right angles to the axis of the tree.

If the tree is branched or deformed at 1.3 metres above the ground level, the measurement must be taken at the nearest point above or below that point, where the tree becomes more cylindrical.

3 Clearing for rural structures on unclassified land

- (1) The clearing of native vegetation to a minimum extent if it is necessary for the construction, operation or maintenance of rural structures.
- (2) For the purposes of this item, *rural structures* includes farm dams, tracks, bores, windmills, fences, fence lines, stockyards, loading ramps, dwellings and sheds, but does not include temporary fences or temporary fence lines.

Riverina Highlands Regional Vegetation Management Plan 2003

Descriptions of exemptions

Schedule 4

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- (3) Where the rural structure is a fence or track, clearing of native vegetation may be carried out up to a maximum of 10 metres either side of the fence or track. However, the clearing may include trees or limbs of trees outside that limit if they are likely to cause serious damage to the fence.
 - (4) Where the rural structure is a dwelling, this exemption applies to a maximum of 0.4 hectare.
 - (5) Any tree that is affected by lopping or other cutting under this item must have a diameter at breast height, within the meaning of the *Plantations and Reafforestation (Code) Regulation 2001*, of less than 50 centimetres.
 - (6) If more than 0.5 hectare of Yellow Box, Blakely's Red Gum, and/or White Box is to be removed in any calendar year, on any property, the activity may be carried out without consent only after notice has been given to the nearest office of the Department of Land and Water Conservation, prior to the commencement of any removal.
Note. Notice is relevant to monitoring potential impact on the habitat of the Superb and Swift Parrot.
 - (7) This item does not allow progressive clearing of the property so that it may be used for agriculture or otherwise.

4 Eucalyptus leaf cutting

In areas previously cut for eucalyptus oil leaf (for the purpose of distilling eucalyptus oil from the leaves), the cutting of *Eucalyptus dives* or *E. radiata* regrowth trees or coppice stems with a diameter at breast height, within the meaning of the *Plantations and Reafforestation (Code) Regulation 2001*, of less than 25 centimetres, but only for the purpose of distilling eucalyptus oil from the leaves.

5 Horticultural harvesting or pruning

Incidental clearing associated with harvesting or pruning operations in association with the management of an existing orchard, vineyard, or other horticultural enterprise, but not clearing for the establishment of an orchard, vineyard or other horticultural enterprise.

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 4 Descriptions of exemptions

6 Indigenous cultural practices

The utilisation of native plant species for traditional Wiradjuri or Walgalu cultural purposes (such as for making tools, implements, food, fibre or medicine), but only for non-commercial use.

7 Minimal tree cutting

- (1) Where less than 40 stems occur in each individual hectare (10,000 square metres) of the property at the commencement of a calendar year, the cutting down of no more than two trees per hectare, up to a maximum of 10 trees for the whole property during the calendar year, if the timber is used (for example, for fence posts and firewood) only on the property on which they are cut down.
- (2) Where 40 or more stems occur in each individual hectare (10,000 square metres) of the property at the commencement of a calendar year, the cutting down during the calendar year of not more than 7 trees per hectare of the whole property, if the timber is used (for example, for fence posts and firewood) only on the property on which they are cut down.
- (3) The trees to be cut down must have a diameter at breast height, within the meaning of the *Plantations and Reafforestation (Code) Regulation 2001*, of less than 50 centimetres.
- (4) In this item, *stem* means a tree with a diameter at breast height, within the meaning of the *Plantations and Reafforestation (Code) Regulation 2001*, of 20 centimetres or more.
- (5) This item does not allow progressive clearing of a property so that it may be used for agriculture or otherwise.

8 Noxious weed eradication

- (1) The clearing of vegetation declared to be a noxious weed under the *Noxious Weeds Act 1993*.
- (2) The clearing of other vegetation in the course of destroying noxious weeds but only:
 - (a) to the minimum extent necessary to destroy noxious weeds, and
 - (b) in accordance with the *Noxious Weed Control Exemption Guidelines* obtainable from the Department of Land and Water Conservation.

Riverina Highlands Regional Vegetation Management Plan 2003

Descriptions of exemptions

Schedule 4

9 Pest control

The clearing of vegetation to the minimum extent necessary for control of burrowing and den-making pests.

Note. Landholders may clear native vegetation to the minimum extent necessary for the control of pests within the meaning of Part 11 of the *Rural Lands Protection Act 1998* and for the control of foxes.

10 Planted native vegetation

The clearing of native vegetation planted for forestry, agriculture, agroforestry, woodlots, gardens and horticultural purposes.

11 Private native forestry

- (1) The clearing of native forest dominated by Alpine Ash (*Eucalyptus delegatensis*), Mountain Gum (*E. dalrympleana*), Ribbon Gum (*E. viminalis*), Eurabbie (*E. globulous* ssp. *bicostata*), Red Stringybark (*E. macrorhyncha*), Broad Leafed Peppermint (*E. dives*) or Narrow Leafed Peppermint (*E. radiata*) in the course of its being selectively harvested on a sustainable basis or managed for forestry purposes (timber production) consistent with the *Guidelines For Sustainable Harvesting of Dry to Moist Open Sclerophyll Forest within Riverina Highlands of New South Wales*, available from the Department of Land and Water Conservation.
- (2) The minimum forest tree crown cover, after harvesting, must be at least 40% of what would be expected for an undisturbed site characterised by similar tree species and in a similar location.
- (3) The volume harvested must not exceed the equivalent of an average of 3 cubic metres per hectare per annum over a period of 20 years or more.
- (4) This activity may be carried out without consent only if the Department of Land and Water Conservation has been given notice of the proposed clearing prior to the commencement of clearing.
- (5) Where the volume harvested will be more than 500 cubic metres of product in total on any contiguous landholding in any one year period, this activity may be carried out without consent only if a forestry management plan documenting forest management practices and harvesting operations has been prepared. If a forestry management plan is required for any clearing but is not produced at the request of the Director-General of the Department of Land and Water Conservation, this item does not allow the clearing until after it is produced.

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 4 Descriptions of exemptions

- (6) A *forestry management plan* should be prepared by a suitably qualified person and contain aerial photographs, topographic maps and written information that cover the following:
- (a) **Land information:**
 - (i) description of the area to which it relates,
 - (ii) a locality plan and identification of access roads,
 - (iii) identification of natural features (drainage lines, swamps, soil types, vegetation types, significant landscape, cultural and heritage values, threatened species etc),
 - (iv) identification of improvements (buildings, roads, bridges, drainage line crossings, fences, gates, powerlines, dams etc).
 - (b) **Tending/silviculture details:**
 - (i) the history and documentation of previous logging or disturbance,
 - (ii) a detailed description of vegetation types, growth and form characteristics,
 - (iii) an explanation of proposed noxious weed and pest animal controls,
 - (iv) a silviculture strategy, including a tree marking program,
 - (v) a fire management strategy.
 - (c) **Harvesting details:**
 - (i) a description of the location of harvesting operations, major snig tracks, and log dumps,
 - (ii) details of conservation measures, including number and type of trees to be protected, locations of drainage line crossings and exclusion areas, such as filter strips,
 - (iii) a description of the effect of weather restrictions on harvesting operations, and on road maintenance,
 - (iv) a timetable showing the period in which logging will occur,
 - (v) details about the intensity of the operation, species to be logged, types of machinery to be used, product types, and felling and extraction procedures,
 - (vi) details of health and safety measures.

Riverina Highlands Regional Vegetation Management Plan 2003

Descriptions of exemptions

Schedule 4

12 Public utility clearing

Minimal clearing of regional protected land or native vegetation if necessary for the maintenance of public utilities (associated with the provision of power lines, transmission of electricity, water, gas, electronic communications or the like) or if there is imminent threat of personal injury or damage to property.

Note. *Imminent threat* is referred to in the *Rural Fires Act 1997*.

13 Regrowth removal

- (1) The removal of vegetation, whether seedlings or regrowth, of less than 10 years of age if the land has been previously cleared for cultivation, pasture or forestry plantation purposes, and is not part of a wetland. Any trees to be cleared must have a diameter at breast height, within the meaning of the *Plantations and Reafforestation (Code) Regulation 2001*, of less than 20 centimetres.
- (2) For areas of regional protected lands—steep and erodible land, regrowth can only be cleared to a maximum extent of two hectares per calendar year, on any property.
- (3) If more than 0.5 hectare of seedlings or regrowth of Yellow Box, Blakely's Red Gum, and/or White Box is to be removed in any calendar year, on any property, the activity may be carried out without consent only after notice has been given to the nearest office of the Department of Land and Water Conservation, prior to the commencement of any removal.

Note. Notice is relevant to monitoring potential impact on the habitat of the Superb and Swift Parrot.

- (4) This item does not allow progressive clearing of the property so that it may be used for agriculture or otherwise.

14 Stock fodder provision

- (1) The lopping of Kurrajong (*Brachychiton* spp.) and Wattles (*Acacia* spp.) for stock fodder within part of the region when NSW Agriculture's current *Regional Review of Seasonal Conditions and Outlook for Agriculture* indicates that part of the region is suffering from drought conditions.
- (2) The lopping must not cause irreversible damage to the remaining vegetation that is lopped.

Riverina Highlands Regional Vegetation Management Plan 2003

Schedule 4 Descriptions of exemptions

15 Clearing by registered surveyors

Survey activities necessary to carry out a survey as defined by the *Surveyors Act 1929* and the *Survey Co-ordination Act 1949*, but only if:

- (a) the surveying is carried out by or under the supervision of a registered surveyor or a surveyor authorised by the Surveyor General of New South Wales, and
- (b) the clearing is to the minimum extent necessary for the surveying concerned.

WATER MANAGEMENT ACT 2000**Regulated River Order No 3**

PURSUANT to the definition of '*regulated river*' in the Dictionary to the Water Management Act 2000, I, JOHN AQUILINA, MP, Minister for Land and Water Conservation, declare by this Order that the *rivers* listed in the Schedule below are *regulated rivers*.

Dated this 21st day of February 2003.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Explanatory note

The dictionary definition of a regulated river in the Water Management Act, 2000 provides that the Minister can declare, by order published in the Gazette, a river to be a regulated river.

SCHEDULE

Anabranh of Namoi River, offtaking in T.S.R. 31104, Parish of Tipereena, County of Nandewar.

Duncan Warrambool.

Gunidgera Creek, offtaking from the Namoi River within T.S.R. 10783, Parish of Tulladunna, County of Jamison, downstream to the northern boundary of portion 21, Parish of Merah, County of Jamison.

Horsearm Creek, from its confluence with Narrabri Creek upstream to a point coinciding with the upstream alignment of the Narrabri to Wee Waa road bridge on Main Road No.127 located in the town of Narrabri, Parish of Narrabri, County of Nandewar.

Manilla River from the upper limit of the Split Rock Dam storage, downstream to its junction with the Namoi River, including all tributaries to the storage (named and unnamed) up to high water mark of the storage.

Namoi River, from its junction with the Manilla River to the upper limit of the storage of Keepit Dam.

Namoi River, from the upper limit of Keepit Dam storage downstream to the offtake of Narrabri Creek, including all tributaries to the storage (named and unnamed) up to high water mark of the storage.

Namoi River from its confluence with Narrabri Creek to Barwon River.

Narrabri Creek.

Pian Creek, from the confluence of unnamed watercourse within portion 27, Parish of Pian, County of Jamison, the confluence being approximately 200 metres east of the western boundary of portion 27 and approximately 400 metres north of the southwestern boundary of that portion, downstream to the northernmost western boundary of portion 37, Parish of Murra Murra, County of Denham.

Ulled lagoon.

Unnamed watercourse, offtaking from Gunidgera Creek within portion 4, Parish of Weeta Waa, County of Jamison, downstream to its confluence with Pian Creek, within T.S.R. 27151, Parish of Pian, County of Jamison.

Unnamed watercourse, from its offtake from Namoi River, in portion 10, Parish of Bullerawa, County of Baradine, to its re-entry in portion 11, said Parish.

Warrian lagoon.

WATER MANAGEMENT ACT 2000**Regulated River Order No 4**

Pursuant to the definition of '*regulated river*' in the Dictionary to the Water Management Act 2000, I, JOHN AQUILINA, MP, Minister for Land and Water Conservation, declare by this Order that the *rivers* listed in the Schedule below are *regulated rivers*.

Dated this 21st day of February 2003.

JOHN AQUILINA, MP
Minister for Land and Water Conservation

Explanatory note

The dictionary definition of a regulated river in the Water Management Act, 2000 provides that the Minister can declare, by order published in the Gazette, a river to be a regulated river.

SCHEDULE

Boomi River from its confluence with Gil Gil Creek in portion 3, Parish of Bibble, County of Benarba, downstream to its confluence with the Barwon River in portion 2, Parish of Bibble, County of Benarba.

Carole Creek from its offtake from the Gwydir River in portion 52, Parish of Boolooroo, County of Courallie downstream to its confluence with Gil Gil Creek.

Gil Gil Creek from its confluence with Carole Creek in T.S.R. 15022, Parish of Gocalla, County of Benarba, downstream to its confluence with Boomi River.

Gwydir Pool from the bifurcation near portion 56, Parish of Carore, County of Courallie, downstream to "The Raft."

Gwydir River from the upper limit of Copeton Dam storage downstream to northwestern boundary of portion 27, Parish of Gin, County of Benarba, including all tributaries to the storage (named and unnamed) up to high water mark of the storage.

Marshalls Ponds Creek from its confluence with Carole Creek upstream to a point 100 metres east of the common boundary of portions 15 and 16, Parish of Bogree, County of Courallie.

Mehi River, from the Tareelaro cutting in portion 16, Parish of Mia Mia, County of Courallie, downstream to the Barwon River.

Moomin Creek from Combadello Weir downstream to its confluence with the Mehi River.

Tyreel Anabranh.

Unnamed watercourse, from its upstream confluence with Moomin Creek, located approximately 404m downstream from the eastern boundary of portion 33, Parish of Bunna Bunna, County of Benarba, to its downstream confluence with Moomin Creek, located approximately 503m from the upstream confluence, all within the abovementioned portion, parish and county.

Unnamed watercourse offtaking from the Gwydir River within portion 39, Parish of Ardgowan, County of Courallie and rejoining the Gwydir River within portion 54, Parish of Ardgowan, County of Courallie.

WATER MANAGEMENT ACT 2000**Regulated River Order No 5**

Pursuant to the definition of '*regulated river*' in the Dictionary to the Water Management Act 2000, I, JOHN AQUILINA, MP, Minister for Land and Water Conservation, declare by this Order that the *rivers* listed in the Schedule below are *regulated rivers*.

Dated this 21st day of February 2003.

JOHN AQUILINA, MP
Minister for Land and Water Conservation

Explanatory note

The dictionary definition of a regulated river in the Water Management Act, 2000 provides that the Minister can declare, by order published in the Gazette, a river to be a regulated river.

SCHEDULE

Bena Billa Creek

Bulgeraga Creek from its confluence with Marebone Break in portion 6, Parish of Marebone, County of Gregory, downstream to the Gum Cowal offtake within portion 13, Parish of Duffity, County of Gregory.

Bulgeraga Creek from the Gum Cowal offtake within portion 13, Parish of Duffity, County of Gregory, downstream to its confluence with the Macquarie River.

Crooked Creek from its offtake from Gunningbar Creek in portion 239, parish of Warren, County of Oxley, downstream to the north-west boundary of portion 93, Parish of Mumblebone, County of Gregory.

Cudgegong River from the upper limit of Windamere Dam water storage downstream to its confluence with the upper limit of Burrendong Dam water storage.

Cumboogle Creek from its junction with Macquarie River to a point 90 metres upstream.

Duck Creek.

Gunningbar Creek from the downstream end of the Gunningbar Creek cutting downstream to the Bogan River.

Macquarie River from the upstream limit of Burrendong Dam water storage, downstream to the Monkeygar Creek offtake.

Marebone Break from its offtake from the Macquarie River in road reserve adjacent to the eastern boundary of portion 12, parish of Marebone, County of Gregory downstream to its confluence with Bulgeraga Creek, in portion 6, Parish of Marebone, County of Gregory.

Mebul Creek from its junction with the Cudgegong River to a point 25 metres upstream.

Ruins Creek from its junction with the Cudgegong River to a point 20 metres upstream.

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

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Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Dorrigo Plateau Surface Water Source and Dorrigo Basalt Groundwater Source 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* as amended (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2003 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Upper North Coast Water Management Area and the Mid North Coast Water Management Area known as the Dorrigo Plateau Surface Water Source (hereafter **this surface water source**) as shown on the map in Schedule 2 and the Dorrigo Basalt Groundwater Source (hereafter **this groundwater source**) as shown on the map in Schedule 3.
- (2) This surface water source and this groundwater source will hereafter be referred to collectively as **these water sources**.

Note. The Upper North Coast Water Management Area and the Mid North Coast Water Management Area are shown on a map in Appendix 1.

Note. Maps referred to in this Plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2.

- (3) This surface water source is divided into the following management zones shown on the map in Schedule 2:
 - (a) Upper Nymboida River management zone (hereafter **Zone 1**),
 - (b) Bielsdown River management zone (hereafter **Zone 2**),
 - (c) Wild Cattle Creek management zone (hereafter **Zone 3**), and
 - (d) Blinks River management zone (hereafter **Zone 4**).

Note. Daily extraction limits are defined for each management zone.

Note. Specific conditions apply to access licence dealings within these management zones.

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5 Waters to which this Plan applies

- (1) The waters of this surface water source include all water occurring on the land surface shown on the map in Schedule 2 including:
 - (a) all rivers in this surface water source including, but not limited to, those nominated in Schedule 4, and
 - (b) all lakes and wetlands in this surface water source.
- (2) The waters of this surface water source exclude all water contained within aquifers underlying this surface water source.
- (3) The waters of this groundwater source, shown in Schedule 3, includes all water contained within the Dorrigo basalt aquifers.

6 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.
- (2) Additional terms to those identified in subclause (1) are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible, the rules embodied in this Plan will apply to matters administered under the *Water Act 1912* in the interim.

8 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) of the Act, this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 5 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

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Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

10 Vision

The vision for this Plan is to have informed, productive communities on the Dorrigo Plateau, living sustainably in a healthy environment by protecting:

- (a) groundwater and surface water dependent ecosystems,
- (b) the quality of water,
- (c) natural and cultural values of National Parks and Reserves,
- (d) security for domestic water supplies,
- (e) access to flows for agricultural industries,
- (f) Aboriginal cultural knowledge,
- (g) low flows impacted by structures, and
- (h) downstream flows and the health of the Clarence River,

through cooperatively managing water with greater equity and awareness.

11 Objectives

The objectives of this Plan are to:

- (a) protect ecosystems that depend on groundwater in this groundwater source by establishing an extraction limit, and limiting extraction from groundwater,
- (b) protect and enhance water quality in line with the Healthy Rivers Commission's recommendations for the Clarence Catchment through the management of surface flows and groundwater extractions on the Dorrigo Plateau,

Note. This objective refers to maintaining water quality. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in this Plan make a positive contribution to maintaining water quality.

- (c) protect the natural and cultural values of the National Parks and Reserves, including the gazetted World Heritage areas, by managing flows,
- (d) protect and enhance surface water dependent ecosystems by managing access to flows in this surface water source,
- (e) enable a secure supply of water for the Dorrigo local water utility, domestic and stock users, including the North Dorrigo and Dundurrabin communities, and downstream users, whilst minimising the impact of extraction on low flows,

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- (f) allow irrigators access to available flows on the Dorrigo Plateau, particularly in the area of Bielsdown and Little Plains Rivers, whilst encouraging innovative and water-use efficient agriculture,
- (g) enhance the overall health of the Clarence River and estuary by enabling flow contributions from the Dorrigo Plateau, and
- (h) protect flows on the Dorrigo Plateau to prevent the misuse of cultural knowledge of the Gumbaingirr tribal areas.

Note. Cultural knowledge includes spiritual, social, cultural and practical (for example recreational, food, medicinal and educational) values.

12 Strategies

The strategies of this Plan are to:

- (a) establish environmental water rules and manage access to groundwater consistent with those rules,
- (b) establish rules for the protection of basic landholder rights,
- (c) establish cease (and commence) to pump levels and flow classes,
- (d) limit the amount of water that can be extracted on a daily basis from different flow classes,
- (e) limit the long term average extraction of surface water,
- (f) establish an extraction limit for this groundwater source, taking into account the requirements of the environment,
- (g) establish rules for minimising the local impacts of groundwater extraction on the environment, and between users,
- (h) establish rules for the granting of access licences,
- (i) clearly define access rules and conditions for extracting water from these water sources,
- (j) establish rules for determining the water available from time to time under access licences,
- (k) establish conditions that will apply to all access licences and water supply work approvals,
- (l) establish water allocation account management rules, and
- (m) specify access licence dealing rules that maximise flexibility for water users without adversely impacting on these water sources.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in groundwater extraction relative to the extraction limit,
- (b) change in low flows at the end of this surface water source,
- (c) change in moderate to high flows at end of this surface water source,

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- (d) change in local water utilities access,
- (e) change in ecological condition of these water sources and their dependent ecosystems,
- (f) extent to which basic landholder rights requirements have been met,
- (g) change in economic benefits derived from water extraction and use,
- (h) extent to which native title rights requirements have been met,
- (i) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (j) contribution to the achievement of water quality to support the environmental values of these water sources.

Note. Appendix 3 details the objectives to which these performance indicators relate and the methods for assessing these indicators.

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Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (c) and 21 (e) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore:
 - (a) that river flow will vary in this surface water source, and
 - (b) that the level of natural recharge will vary in this groundwater source.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of water in these water sources within the limits of water availability on a long-term average basis,
 - (b) the sharing of flows that occur in this surface water source on a daily basis, and
 - (c) water extractions to enable the protection of groundwater dependent ecosystems, aquifer integrity and water quality of this groundwater source.

16 Extraction management unit for the surface water source

- (1) The availability of water for extraction from this surface water source on a long-term average basis will be determined at the level of an extraction management unit.
- (2) The extraction management unit of which this surface water source is part is known as the Nymboida River Catchment Extraction Management Unit, and is shown on the map in Schedule 6.

17 Flow classes for the surface water source

This Plan establishes, the following flow classes as the basis for sharing of daily flows from this surface water source:

- (a) For Zone 1:
 - (i) very low flow class at or less than 75 megalitres/day (hereafter *ML/day*),
Note. The 75 ML/day corresponds to the estimated 95th percentile of flows in November, the critical month, and is referred to as the cease to pump on a falling river and the commence to pump on a rising river.
 - (ii) A class flows greater than 75 ML/day and at or less than 128 ML/day,
 - (iii) B class flows greater than 128 ML/day and at or less than 221 ML/day, and
 - (iv) C class flows greater than 221 ML/day.

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- (b) For Zone 2:
- (i) very low flow class at or less than 23 ML/day,
Note. The 23 ML/day corresponds to the estimated 98th percentile of flows in November, the critical month, and is referred to as the cease to pump on a falling river and the commence to pump on a rising river.
 - (ii) A class flows greater than 23 ML/day and at or less than 60 ML/day,
 - (iii) B class flows greater than 60 ML/day and at or less than 128 ML/day, and
 - (iv) C class flows greater than 128 ML/day.
- (c) For Zone 3:
- (i) very low flow class at or less than 17 ML/day,
Note. The 17 ML/day corresponds to the estimated 90th percentile of flows in November, the critical month, and is referred to as the cease to pump on a falling river and the commence to pump on a rising river.
 - (ii) A class flows greater than 17 ML/day and at or less than 22 ML/day,
 - (iii) B class flows greater than 22 ML/day and at or less than 54 ML/day, and
 - (iv) C class flows greater than 54 ML/day.
- (d) For Zone 4:
- (i) very low flow class at or less than 13 ML/day,
Note. The 13 ML/day corresponds to the estimated 95th percentile of flows in December, the critical month, and is referred to as the cease to pump on a falling river and the commence to pump on a rising river.
 - (ii) A class flows greater than 13 ML/day and at or less than 40 ML/day,
 - (iii) B class flows greater than 40 ML/day and at or less than 119 ML/day, and
 - (iv) C class flows greater than 119 ML/day.

Note. Very low flow access conditions are established under clause 73 for cleaning for dairy plants and clause 75 (a) for local water utilities.

Note. The flow classes have been determined based on flow information that inherently includes seasonal effects as well as evaporation and seepage losses.

18 Flow reference point for the surface water source

For the purpose of this Plan, all flows referred to relate to the estimated flows at the flow reference point at the downstream end of each zone, as shown on the map in Schedule 2.

19 Determination of flow class for the surface water source

Announcement of daily flow classes will be made from time to time by the Minister based on the flow at a flow gauging station, correlated to the flow reference point established in clause 18.

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20 Recharge for the groundwater source

- (1) The overall basis for sharing groundwater in this Plan is the average annual recharge of 50,000 megalitres per year (hereafter *ML/yr*).

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Part 4 Environmental water provisions

21 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

22 Environmental health water

(1) Environmental health water for this surface water source is identified and established as follows:

- (a) In very low flows, the flow occurring in each Zone minus:
- (i) 0.03 ML/day in Zone 1, and minus very low flow access provided for in clause 73,
 - (ii) 1.52 ML/day in Zone 2, and minus very low flow access provided for in clause 73,
 - (iii) 0.008 ML/day in Zone 3, and minus very low flow access provided for in clause 73, and
 - (iv) 0.02 ML/day in Zone 4, and minus very low flow access provided for in clause 73.

Note. 0.03 ML/day, 0.008 ML/day and 0.02 ML/day are the amounts of water estimated at the commencement of the Plan for basic landholder rights in Zones 1, 3, and 4 respectively. 1.52 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights and local water utility very low flow access in Zone 2.

- (b) In A class flows, the flow occurring in each Zone minus:
- (i) 17.23 ML/day in Zone 1,
 - (ii) 36.02 ML/day in Zone 2,
 - (iii) 4.408 ML/day in Zone 3, and
 - (iv) 8.02 ML/day in Zone 4.

Note. 17.23 ML/day, 36.02 ML/day, 4.408 ML/day, and 8.02 ML/day are the amounts of water estimated at the commencement of the Plan for basic landholder rights in Zones 1, 2, 3, and 4 respectively, plus the total daily extraction limit for each Zone in A class flows.

- (c) In B class flows, the flows occurring in each Zone minus:
- (i) 26.53 ML/day in Zone 1,
 - (ii) 51.22 ML/day in Zone 2,
 - (iii) 10.808 ML/day in Zone 3, and
 - (iv) 23.82 ML/day in Zone 4.

Note. 26.53 ML/day, 51.22 ML/day, 10.808 ML/day, and 23.82 ML/day are the amounts of water estimated at the commencement of the Plan for basic landholder rights in Zones 1, 2, 3, and 4 respectively, plus the total daily extraction limit for each Zone in B class flows.

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- (d) In C class flows, the flow occurring in each Zone minus:
- (i) 43.53 ML/day in Zone 1,
 - (ii) 69.02 ML/day in Zone 2,
 - (iii) 21.208 ML/day in Zone 3, and
 - (iv) 48.62 ML/day in Zone 4.
- Note.** 43.53 ML/day, 69.02 ML/day, 21.208 ML/day, and 48.62 ML/day are the amounts of water estimated at the commencement of the Plan for basic landholder rights in Zones 1, 2, 3, and 4 respectively, plus the total daily extraction limit for each Zone in C class flows.
- (2) Environmental health water for this surface water source is maintained in very low flows as follows:
- (a) the holders of access licences are not permitted any access in any Zone, unless provided for in clause 73 or clause 75, and
 - (b) persons exercising domestic and stock and native title rights may take a combined total of up to:
 - (i) 0.03 ML/day in Zone 1,
 - (ii) 0.02 ML/day in Zone 2,
 - (iii) 0.008 ML/day in Zone 3, and
 - (iv) 0.02 ML/day in Zone 4.
- Note.** The Minister may issue an order under section 328 of the Act to restrict the exercise of domestic and stock rights from this surface water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.
- (3) Environmental health water for this surface water source is maintained in each of A class, B class and C class flows as follows:
- (a) the holders of access licences have restricted access to water as specified in clause 47,
 - (b) persons exercising domestic and stock and native title rights may take water, and
 - (c) if the water taken under domestic and stock and native title rights is assessed to be exceeding the following amounts in these flow classes, then the access to water for access licences will be reduced in accordance with clause 52 to maintain the environmental water in these flow classes:
 - (i) 0.03 ML/day in Zone 1,
 - (ii) 0.02 ML/day in Zone 2,
 - (iii) 0.008 ML/day in Zone 3, and
 - (iv) 0.02 ML/day in Zone 4.
- (4) In all flow classes, limits are imposed on the availability of water in accordance with clauses 37 and 39, that protect a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction.
- Note.** These rules protect the water for the environment by limiting both the water extracted over the long term, and the rate of extraction of water in different flow ranges, thereby achieving the objectives of this Plan.

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- (5) Environmental health water for this groundwater source is identified and established as follows:
- (a) the long-term average storage component of this groundwater source minus the basic landholder rights extraction is reserved for the environment, and
 - (b) 90% of the average annual recharge is reserved for the environment.
- (6) Pursuant to section 42(2) of the Act, the Minister may vary the proportion of recharge reserved as the environmental health water in subclause (5)(b) when the total share components in this groundwater source reach 10% of the recharge established in clause 20, based on an assessment by the Minister of the impact of allowing greater levels of groundwater extraction.
- Note.** The extent of impact on this change is limited by the provisions in clause 38.
- (7) The assessment at subclause (6) should consider groundwater dependent ecosystems associated with this groundwater source, the linkages between groundwater and surface water, Aboriginal values, the potential economic benefit from additional water use and alternative sources of additional water, including Part 11 of this Plan.
- (8) The Minister should consult with the Minister for the Environment before varying environmental health water in accordance with subclause (6).

Note. This Plan recognises that the environmental health water provisions provide non-extractive benefits, including traditional Aboriginal cultural benefits, and a contribution to improved water quality.

23 Extraction by water supply work

Notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only if there is visible flow in the river in the vicinity of the work.

24 Supplementary environmental water

At the commencement of this Plan, there is no water committed for specified environmental purposes in accordance with section 8 (1) (b) of the Act.

25 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
- (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there is a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

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Part 5 Basic landholder rights

26 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

Note. The Minister may issue an Order under section 328 of the Act to restrict the exercise of basic landholder rights from these water sources to protect the environment, for reasons of public health, or to preserve existing basic landholder rights. The order may stipulate restrictions on domestic use, and that stock watering be carried out from off-river water storages, where such facilities exist.

27 Domestic and stock rights

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights are estimated to be a total of:
 - (a) 0.078 ML/day within this surface water source, comprising:
 - (i) 0.03 ML/day in Zone 1,
 - (ii) 0.02 ML/day in Zone 2,
 - (iii) 0.008 ML/day in Zone 3, and
 - (iv) 0.02 ML/day in Zone 4
 - (b) 111.2 ML/yr within this groundwater source.
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in this surface water source or an increase in the number of landholdings overlying this groundwater source, and/or as a result of the increase in the exercise of basic landholder rights by existing landholders.

Note. It is not recommended that the water from this groundwater source be consumed without prior treatment. Land use activities may have polluted the groundwater in some areas.

28 Native title rights

- (1) At the commencement of this Plan there are no holders of native title rights in these water sources and therefore the water requirements for native title rights are a total of 0 ML/yr.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note. An increase in native title rights may occur as a result of the granting of native title rights under the Commonwealth's *Native Title Act 1993*.

29 Harvestable rights

The requirement for water under harvestable rights is the amount of surface water owners of land are entitled to capture pursuant to the harvestable rights Order published in the NSW Gazette on 23 March 2001 under section 54 of the Act.

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Part 6 Bulk access regime

30 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in these water sources having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climatic variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 9 Division 2 of this Plan,
 - (e) establishes rules according to which access licences are managed as provided for in Parts 9 and 10 of this Plan, and
 - (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Part 9 of this Plan.

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Part 7 Requirements for water under access licences

31 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The amount of water specified in this Part represents the total volumes specified on access licences in these water sources. It is not a commitment to supply that water.

32 Estimate of water requirements

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, the requirements identified for water for extraction under access licences:
 - (a) within this surface water source will total approximately 9,902 ML/yr, and
 - (b) within this groundwater source will total approximately 254 ML/yr.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in this area in respect of which this Plan is made, there will be several runoff harvesting access licences in this surface water source, that will have their access licence share component expressed as the water that can be extracted from time to time from the approved water supply works.
- (3) This Plan recognises that the total requirements for water for extraction within these water sources may change during the term of this Plan as a result of:
 - (a) the granting, surrender, cancellation or non-renewal of access licences,
 - (b) the variation of local water utility licences under section 66 of the Act, or
 - (c) the volumetric conversion of the share components of existing access licences that are currently non-volumetric.

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Part 8 Rules for granting access licences

33 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in these water sources, and the need to protect the ecological health of the river, the groundwater dependent ecosystems and groundwater quality.
- (2) Access licences may be granted in these water sources subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in these water sources, other than access licences of the following kind:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) domestic and stock access licences,
 - (c) an access licence resulting from an application of a type listed in section 82 (1) of the Act,
 - (d) an unregulated river (research) access licence where the share component does not exceed 10 ML/yr per application,
 - (e) an unregulated river (Aboriginal cultural) access licence where the share component does not exceed 10 ML/yr per application,
 - (f) an unregulated river (Aboriginal commercial) access licence where the share component does not exceed 10 ML/yr per application,
 - (g) an aquifer (Aboriginal cultural) access licence where the share component does not exceed 10 ML/yr per application, or
 - (h) an aquifer (research) access licence where the share component does not exceed 10 ML/yr per application, or
 - (i) aquifer access licences, while the total aquifer access licence share components in this groundwater source remains less than the extraction limit established in clause 37.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share and components sought will be the minimum required to meet that purpose and circumstance.
- (5) Any individual daily extraction limit (hereafter *IDEL*) granted in accordance with this clause should not exceed the IDEL initially assigned to an equivalent share component for that category of access licence, as varied by clause 52.
- (6) In accordance with section 56 of the Act, all access licences in these water sources shall have a share component expressed as a volume in ML/yr.

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- (7) Notwithstanding subclause (6), in this surface water source, runoff harvesting access licences may have the share component expressed either in ML/yr, or in terms of the amount of water which can be extracted from time to time from specified works.
- (8) In this groundwater source, access licences granted under this Part cannot be extracted through a water supply work (bore) located in an area where the full extraction authorised by access licences nominating supply works (bores) located in the area, and the exercise of basic landholder rights, are likely to cause adverse local impact, as outlined in Part 10 Division 4 of this Plan.
- (9) In this groundwater source, if an access licence share component applied for is significant, as determined by the Minister on the basis of the particular aquifer characteristics, the application will not be granted until a water supply work (bore) approval has been granted and the work constructed.
- (10) Once the water supply work (bore) is constructed and the results of a pumping test or its equivalent are supplied by the applicant, in the required form and to the specification of the Minister, the access licence may be granted.
- (11) The share component of the access licence granted under subclause (10) will be the proportion of the share component sought that the water supply work (bore) is capable of extracting without adverse local impact, as outlined in Part 10 Division 4 of this Plan.
- (12) Subclauses (9), (10) and (11) do not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.

34 Aboriginal assessment of new access licences

The Minister will seek the views of the Dorrigo Plateau Local Aboriginal Lands Council and/or relevant Elders group on all new access licence applications in relation to the impact on sites of significance and appropriate mitigation measures.

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Part 9 Limits to the availability of water

Division 1 Long-term average extraction limit

35 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

36 Extraction management unit for the surface water source

In accordance with clause 16 (2), management of the long-term extraction of surface water in this surface water source will be undertaken in the context of the Nymboida River Catchment Extraction Management Unit (hereafter *this Unit*).

37 Long-term average extraction limits

- (1) The long term average extraction limit for this Unit will be the total of:
 - (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in this Unit, immediately prior to the commencement of Part 2 of Chapter 3 of the Act for this surface water source, and
 - (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in this surface water source at the commencement of this Plan.
- (2) The long term average extraction limit for this groundwater source each year of this Plan is 5,000 ML/yr which equates to the recharge established in clause 20, minus the proportion of recharge reserved as environmental health water in clause 22.

38 Variation of the long-term average extraction limits

- (1) The long term average extraction limit of this Unit may be varied by the Minister if dealings under Part 11 of this Plan result in the issuing or cancellation of access licences in this Unit.
- (2) Pursuant to section 42 (2) of the Act, the Minister may vary the long-term average extraction limit for this groundwater source established under clause 37 (2) as a result of any change to the environmental health water arising from clause 22 (6).
- (3) If there is any change to the long-term average extraction limit arising from subclause (2) then the extraction limit in clause 37 (2) will not decrease, and will not increase, by more than 25%.

Division 2 Available water determinations

39 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules for this surface water source:

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- (a) water extraction in this Unit will be monitored in each water accounting year to determine if there is any growth in volumes extracted above the extraction limit specified in clause 37 (1), based on comparison of the extraction limit against the average extraction within this Unit over that year and the preceding 2 years,
Note. A water accounting year is defined in clause 44 (3).
- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in a river for environmental purposes, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work,
- (d) for all access licences, an initial available water determination, of such volume of water as is equivalent to two times the access licence share component, should be made on 1 July 2003, and such determination should apply for one water accounting year,
- (e) from 1 July 2004, available water determinations for local water utility and domestic and stock access licences should be of such volume of water as is equivalent to the access licence share component, with priority given to making this water available above the making of water available to all other categories of access licence, and such determinations should be made annually,
- (f) from 1 July 2004, available water determinations for unregulated river access licences, including all subcategories, should be such volume of water as is equivalent to the access licence share component, except as provided in subclauses (g) and (h), and such determinations should be made annually,
- (g) if the 3 year average of extraction in this Unit exceeds the long-term average extraction limit established in clause 37 (1) by 5% or greater, then the available water determination for the following water accounting year for unregulated river access licences in this water source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
- (h) if the 3 year average of extraction in this Unit is less than 95% of the long-term average extraction limit established in clause 37 (1), the available water determination for unregulated river access licences in this water source shall be increased to such an extent as to allow extraction to increase to that extraction limit,
- (i) notwithstanding subclause (h), the available water determination shall not exceed 100% of total access licence share components,
- (j) a new available water determination for unregulated river access licences determined under subclause (g) or (h) should be repeated for each of the subsequent two water accounting years unchanged in quantity, and

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- (k) available water determinations for runoff harvesting access licences should be made annually and should be either the access licence share component or the water that can be extracted from time to time from the approved works, depending on the manner in which the share component is expressed on the licence.
- (3) In making available water determinations under Section 59 of the Act, the Minister should consider the following rules for this groundwater source:
- (a) water extraction will be monitored in each water accounting year to determine if any growth in volumes extracted is occurring above the extraction limit in clause 37 (2), based on comparison of the extraction limit against the average extraction within this groundwater source over that year and the preceding 2 years,
- Note.** A water accounting year is defined in clause 44 (3).
- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in the aquifer for environmental purposes, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work (bore),
- (d) if the 3 year average of extraction exceeds the long term average extraction limit established in clause 37 (2) by 5% or greater, the available water determination for the following water accounting year for aquifer access licences should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
- (e) if the 3 year average of extraction is less than 95% of the long term average extraction limit established in clause 37 (2), then the available water determination for aquifer access licences shall be increased to such an extent as to allow extraction to increase to that extraction limit,
- (f) notwithstanding subclause (e), the available water determination shall not exceed 100% of total access licence share components,
- (g) the available water determination calculated in accordance with this clause will apply to all access licences excepting local water utility and domestic and stock access licences and will be the same percentage for all access licences to which it applies, and
- (h) separate available water determinations will be made for both local water utility and domestic and stock access licences, and subject to section 60 of the Act, this shall be 100% these access licence share components.

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Part 10 Rules for managing access licences

Division 1 General

40 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 21 (a) and 21 (c) of the Act, having regard to:

- (a) the environmental water rules established in Part 4 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 5 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 7 of this Plan.

Division 2 Water allocation account management

41 Water allocation account management

This Division is made in accordance with sections 20 (2) (b) and 21 (c) of the Act.

42 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in these water sources.

Note. Water allocations may be assigned to, or from, from these accounts by a water allocation assignment made under section 71G of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Note. In this surface water source, water allocations may also be recredited to these accounts in accordance with section 76 of the Act, subject to the operation of a return flows scheme established under section 75 of the Act.

43 Accrual of water allocations

Water allocations will be accrued into water allocation accounts in accordance with the Minister's available water determinations as specified in clause 39.

44 Annual accounting for water extraction

- (1) Water taken from these water sources will be accounted for at least annually.
- (2) Water extracted by an approved water supply work nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) In this surface water source the maximum water allocation that can be carried over from one water accounting year to the next is as follows:
 - (a) 100% of the access licence share component from 2003/4 to 2004/5,
 - (b) 200% of the access licence share component from 2004/5 to 2005/6, and

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- (c) thereafter, the sum of the previous two available water determinations.
- (5) Notwithstanding subclause (4) in this surface water source total water in any water allocation account cannot exceed 3 times the share component of the access licence:
- (a) plus any water allocations assigned from another licence by a water allocation assignment under section 71G of the Act in that year,
 - (b) plus any water allocations re-credited in accordance with section 76 of the Act in that year, and
 - (c) minus any water allocations assigned to another licence by a water allocation assignment under section 71G of the Act in that year.
- (6) In any one water accounting year, water taken from this surface water source under an access licence may not exceed a volume consisting of:
- (a) twice the water allocation accrued under the licence that year,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71G of the Act in that year,
 - (c) plus any water allocations re-credited in accordance with section 76 of the Act in that year, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71G of the Act in that year.
- (7) In any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 4 of this Plan, water taken from this groundwater source under an aquifer access licence may not exceed a volume consisting of:
- (a) 100% of the access licence share component,
 - (b) plus any water allocations assigned from another licence under section 71G of the Act in that year, and
 - (c) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (8) Total water in any account relating to this groundwater source at any time may not exceed a volume consisting of:
- (a) 100% of the aquifer access licence share component,
 - (b) plus any water allocations assigned from another licence under section 71G of the Act in that year, and
 - (c) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (9) Allocations in a water allocation account pertaining to this groundwater source cannot be carried over from one water accounting year to the next.
- (10) A water allocation account shall remain at or above zero at all times.

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45 Three year accounting for surface water extraction

- (1) Water taken from this surface water source in any 3 consecutive water accounting years under an access licence may not exceed a volume consisting of:
 - (a) the water allocations accrued under the licence in those years,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71G of the Act in those years,
 - (c) plus any water allocations re-credited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71G of the Act in those years.
- (2) Notwithstanding subclause (1), water taken under an access licence from this surface water source in the first 3 water accounting years of this Plan may not exceed a volume consisting of:
 - (a) 3 times the share component of the access licence,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71G of the Act in those years,
 - (c) plus any water allocations re-credited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71G of the Act in those years.

Division 3 Sharing surface water flows on a daily basis

46 Sharing surface water flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act and applies to the surface water source.

47 Total daily extraction limits

- (1) In this surface water source, this Plan establishes a total daily extraction limit (hereafter *TDEL*) for each surface water flow class as follows:
 - (a) Zone 1:
 - (i) very low flow access in accordance with clause 73 during years 1 to 5 of this Plan, and 0 ML/day in the very low flows during years 6 to 10 of this Plan,
 - (ii) 17.2 ML/day for A class,
 - (iii) 26.5 ML/day for B class, and
 - (iv) 43.5 ML/day for C class.

Note. These flows represent 13.4% of the top of A class flows, 12% of the top of B class flows and in C class flows 10% of the 30th percentile flows in November, the critical month.
 - (b) Zone 2:

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- (i) very low flow access for local water utilities in accordance with clause 75, and very low flow access in accordance with clause 73 during years 1 to 5 of this Plan, and 0 ML/day in the very low flows during years 6 to 10 of this Plan,
- (ii) 36 ML/day for A class,
- (iii) 51.2 ML/day for B class, and
- (iv) 69 ML/day for C class.

Note. These flows represent 60% of the top of A class flows, 40% of the top of B class flows and in C class flows 30% of the 30th percentile flows in November, the critical month.

(c) Zone 3:

- (i) very low flow access in accordance with clause 73 during years 1 to 5 of this Plan, and 0 ML/day in the very low flows during years 6 to 10 of this Plan,
- (ii) 4.4 ML/day for A class,
- (iii) 10.8 ML/day for B class, and
- (iv) 21.2 ML/day for C class.

Note. These flows represent 20% of the top of A class flows, 20% of the top of B class flows and in C class flows 20% of the 30th percentile flows in November, the critical month.

(d) Zone 4:

- (i) very low flow access in accordance with clause 73 during years 1 to 5 of this Plan, and 0 ML/day in the very low flows during years 6 to 10 of this Plan,
- (ii) 8 ML/day for A class,
- (iii) 23.8 ML/day for B class, and
- (iv) 48.6 ML/day for C class.

Note. These flows represent 20% of the top of A class flows, 20% of the top of B class flows and in C class flows 20% of the 30th percentile flows in December, the critical month.

- (2) The TDEL for each flow class specified in subclause (1) applies to all rivers within this surface water source apart from those rivers identified as minor streams in a harvestable rights Order made under section 54 of the Act.

Note. The harvestable rights Order applying to this area at the commencement of this Plan is that gazetted on 23 March 2001 under section 54 of the Act. It identifies minor streams as non-permanent 1st and 2nd order streams as shown on topographic maps.

48 Initial assignment of the TDEL to categories of access licences

- (1) The TDEL for each flow class in this surface water source will be initially assigned to domestic and stock access licences as follows:
- (a) for Zone 1:
 - (i) 0.1 ML/day of A class,

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- (ii) 0.1 ML/day of B class, and
 - (iii) 0.1 ML/day of C class.
 - (b) for Zone 2:
 - (i) 0.3 ML/day of A class,
 - (ii) 0.3 ML/day of B class, and
 - (iii) 0.3 ML/day of C class.
 - (c) for Zone 3:
 - (i) 0.1 ML/day of A class,
 - (ii) 0.1 ML/day of B class, and
 - (iii) 0.1 ML/day of C class.
 - (d) Zone 4:
 - (i) 0.1 ML/day of A class,
 - (ii) 0.1 ML/day of B class, and
 - (iii) 0.1 ML/day of C class.
- (2) The TDEL for each flow class in this surface water source will be initially assigned to local water utility access licences as follows:
 - (a) for Zone 1:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of C class.
 - (b) for Zone 2:
 - (i) 1.5 ML/day of very low flows,
 - (ii) 1.5 ML/day of A class,
 - (iii) 1.5 ML/day of B class, and
 - (iv) 1.5 ML/day of C class.
 - (c) for Zone 3:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of C class.
 - (d) Zone 4:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of C class.
- (3) The TDEL for each flow class in this surface water source will be initially assigned to unregulated river access licences as follows:
 - (a) for Zone 1:
 - (i) 8.8 ML/day of A class,

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- (ii) 8.8 ML/day of B class, and
 - (iii) 8.8 ML/day of C class.
 - (b) for Zone 2:
 - (i) 34.2 ML/day of A class,
 - (ii) 49.4 ML/day of B class, and
 - (iii) 50.4 ML/day of C class.
 - (c) for Zone 3:
 - (i) 2 ML/day of A class,
 - (ii) 2 ML/day of B class, and
 - (iii) 2 ML/day of C class.
 - (d) Zone 4:
 - (i) 4.4 ML/day of A class,
 - (ii) 4.4 ML/day of B class, and
 - (iii) 4.4 ML/day of C class.
 - (e) Schedule 7 unregulated river access licences have limited access to very low flows for each Zone in accordance with clause 73.
- (4) The TDEL for each flow class in this surface water source will be initially assigned to unregulated river (Aboriginal cultural and commercial) access licences as follows:
 - (a) for Zone 1:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of C class.
 - (b) for Zone 2:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of C class.
 - (c) for Zone 3:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of C class.
 - (d) Zone 4:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of C class.

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49 Unassigned TDEL

At the commencement of this Plan, unassigned TDEL in each flow class is as follows:

- (a) in Zone 1:
 - (i) 8.3 ML/day of A class,
 - (ii) 17.6 ML/day of B class, and
 - (iii) 34.6 ML/day of C class,
- (b) in Zone 2:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 16.8 ML/day of C class,
- (c) in Zone 3:
 - (i) 2.3 ML/day of A class,
 - (ii) 8.7 ML/day of B class, and
 - (iii) 19.1 ML/day of C class,
- (d) in Zone 4:
 - (i) 3.5 ML/day of A class,
 - (ii) 19.3 ML/day of B class, and
 - (iii) 44.1 ML/day of C class.

Note. Unassigned TDEL may vary as a result of the surrender or cancellation or non-renewal of an access licence's IDELs, or the operation of Part 8 of this Plan.

50 Daily extraction limits for individual access licence holders

- (1) Each access licence requiring an IDEL, as specified in Part 12 of this Plan, is assigned the same proportion of the TDEL specified in clause 48 as its share component bears to all the share components of licences of that category.
- (2) Notwithstanding subclause (1), in relation to those access licences that are currently excluded from a flow class or part of a flow class by existing conditions on the access licence or the water supply work nominated by the access licence, the IDEL resulting from subclause (1) will be adjusted to reflect as far as possible such an exclusion.

51 Granting of unassigned TDEL

- (1) Prior to the Minister making an amendment under clause 87 (1), the unassigned A and B class TDELs in clause 49 shall not be assigned.
- (2) Prior to the Minister making an amendment under clause 87 (1), the unassigned C class TDEL in clause 49 may be assigned to access licences in the following circumstances:
 - (a) where they are applied for as part of a new access licence application consistent with clause 33 (3) (a) to (f), or
 - (b) to a local water utility access licence where the Minister varies the access licence in accordance with sections 66 (3) or 66 (4) of the Act.

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- (3) After the Minister makes an amendment under clause 87 (1), and if the very low flow level in the zone is increased, the Minister may distribute all or part of the unassigned A class and B class TDELS to existing unregulated river access licences in that zone.
- (4) Any additional TDEL assigned as IDEL to an access licence in subclause (3), will be in the same proportion of the zone's additional TDEL as the access licence share component bears to all the unregulated river access licence share components in that zone.
- (5) Subsequent to subclause (3), and pursuant to section 42 (2) of the Act, the Minister may reduce the volume of any unassigned A and B class TDEL in clause 49 following the year 5 review of this Plan, based on an assessment by the Minister of the needs of users and the environment within this surface water source and downstream surface water sources in the Nymboida River Catchment Extraction Management Unit.
- (6) The reduction in the volume of unassigned TDEL cannot exceed the volumes specified in clause 49, as amended by clause 52.
- (7) Following any assignment of unassigned TDELS in accordance with subclause (3), and any further amendment to the unassigned TDELS in accordance with subclause (5), 50% of the remaining unassigned A and B class TDELS in each Zone will be included as unregulated river (Aboriginal cultural or commercial) TDELS in clause 48 (4).
- (8) From year 6 to year 10 of this Plan, any remaining unassigned TDEL may be assigned to access licences in the following circumstances:
 - (a) where they are applied for as part of a new access licence application consistent with clause 33 (3) (a) to (f), or
 - (b) to a local water utility access licence where the Minister varies the access licence in accordance with sections 66 (3) or 66 (4) of the Act.
- (9) Where additional IDELS are assigned to an access licence in accordance with subclause (8), the amount of IDEL so assigned shall be determined by the Minister consistent with the ratios of share component to IDEL for the specific category of access licence as initially assigned under clause 50, as amended by clause 52.

52 Adjustment to TDELS and IDELS

- (1) Where IDELS are assigned under clause 51 the unassigned TDEL is reduced accordingly, and the TDEL assigned to the appropriate licence category in clause 48 is increased accordingly.
- (2) Pursuant to section 42 (2) of the Act, if total extraction of water under domestic and stock or native title rights in a zone exceeds the level specified in Part 5 of this Plan:
 - (a) first any unassigned TDEL in that zone then, if necessary, the TDEL for unregulated river access licences for that zone in clause 48 (3) shall be diminished to allow these additional basic landholder rights to be met, and
 - (b) the IDELS of each unregulated river access licence in that zone will then be reduced to comply with this diminished TDEL.

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- (3) Pursuant to section 42 (2) of the Act, if any unassigned TDEL in a zone cannot meet either:
 - (a) the IDEL requirements of applicants for new access licences for domestic and stock access, unregulated river (Aboriginal cultural) access and unregulated river (research) access, or
 - (b) a local water utility's IDEL requirements resulting from a variation by the Minister under sections 66 (3) or 66 (4) of the Act,then the TDEL for unregulated river access licences in that zone in clause 48 (3) will be diminished to such an extent as to allow those requirements to be met.
- (4) Following an adjustment to the TDEL for unregulated river access licences in subclause (3) the IDELs of each unregulated river access licence in the zone will then be reduced to comply with this diminished TDEL.
- (5) Any adjustment to unregulated river access licence IDELs arising from this clause will be done at intervals of no greater than 5 years.
- (6) If water that, pursuant to an access licence:
 - (a) is committed to adaptive environmental water, then the TDEL for categories and classes specified on the committed access licence will be reduced by the IDEL on the access licence so committed and clauses 47 and 48 adjusted accordingly, or
 - (b) is uncommitted to adaptive environmental water, then the TDEL for categories and classes specified on the committed access licence will be increased by the IDEL on the access licence so uncommitted and clauses 47 and 48 adjusted accordingly.

53 Administrative arrangements for managing access to daily flows

- (1) Notwithstanding the forgoing provisions of this Division, this Plan allows group management of access licences with respect to the IDELs.
- (2) The Minister may determine that, from the commencement of this Plan and until otherwise determined:
 - (a) all access licences with IDELs shall be made part of a group maintained by the Minister, and
 - (b) access licences with IDELs will be assessed as a whole against their combined IDELs.
- (3) At any time when subclause (2) does not apply:
 - (a) access licence holders may make a request to form a group for their access licences,
 - (b) access licence holders may have their access licence removed from a group, in which case they shall be permitted to extract under that licence a maximum of the licensed IDEL, and
 - (c) where an access licence is removed or added to a group, the group combined IDEL shall be adjusted by the amount of IDEL on the subject access licence.
- (4) Groups will be managed according to the following rules:

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- (a) daily extraction by a group cannot exceed the combined IDELs of all access licences in the group,
- (b) where it been assessed that a holder of an access licence within a group is repeatedly causing the combined IDEL to be exceeded then the Minister may remove that access licence from the group,
- (c) where daily extraction by a group exceeds the combined IDELs of all access licences in the group, then the Minister may dissolve the group and require each access licence holder to comply with the licensed IDELs,
- (d) should a holder of an access licence which is part of a group commit the IDELs of that licence to the environment consistent with section 8 (1) (c) of the Act, then those IDELs shall be removed from the group,
- (e) an access licence may not be in more than one group, and
- (f) the Minister may refuse to allow an access licence to be included in a group, and may refuse a request to form a group.

54 Infrastructure failure in this surface water source

In the event of infrastructure failure in this surface water source, the Minister can elect to:

- (a) continue to announce the current flow class,
- (b) announce another flow class based on climatic conditions and any other flow gauging information, or
- (c) restrict access to water to the lowest flow class.

Note. Infrastructure is defined in the dictionary.

Note. If satisfied that it is necessary to do so in the public interest, the Minister may direct the holders of an access licence to cease using a water supply work in accordance with section 323 of the Act.

Division 4 Management of local impacts in the groundwater source

55 Management of local impacts in the groundwater source

This Division is made in accordance with section 21 (a) of the Act and applies to the groundwater source.

56 Extraction interference between neighbouring bores

- (1) To minimise interference between extraction under different access licences in this groundwater source, extraction authorised by a new access licence of greater than 20 ML/yr will not be permitted from a water supply work (bore) within 400 metres of an approved water supply work (bore) nominated by another access licence.
- (2) The Minister may, upon application by an access licence holder, reduce the distance restriction specified in subclause (1) if:

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- (a) an hydrological study undertaken by the licence holder, and assessed as adequate by the Minister, demonstrates minimal potential for any adverse impact on existing licensed extraction,
 - (b) all potentially affected access licence holders have been notified by the proponent, and

Note. Potentially affected access licence holders are typically neighbouring access licence holders and/or those in the near vicinity.
 - (c) there is a process for remediation in the event that any adverse impact occurs in the future, specified as conditions on the licence.
- (3) Subclause (1) does not apply to extraction under existing access licences.
- Note:** The intention of this clause is to minimise the impact of extraction under new access licences on extraction under existing access licences. It is intended to develop models to support hydrogeological assessment of the adverse impacts of new groundwater extractions on existing licensed extraction.

57 Water level management

- (1) The Minister may declare that, in order to protect water levels within this groundwater source, local access rules are to apply in a defined area known as a local impact area.
- (2) If water levels in any part of this groundwater source have declined to such an extent that adverse impact is occurring, or is likely to occur, extraction from all water supply works (bores) within a local impact area declared under subclause (1) and nominated by an access licence, will be restricted to such an extent and for such time as is required to reinstate water levels to such a degree as to mitigate or avoid that impact.

Note. This clause recognises that in some locations, at certain periods of high groundwater demand, critical water level declines may occur, and that additional extraction limitations may be required.

Note. It is intended that local impact models will be developed and used to predict water level declines in a local area under different extraction scenarios. Significant drops and minimum sustainable groundwater levels can then be set for an area based on the requirements of groundwater dependent ecosystems in the locality, and on the impact that reduced water levels may have on basic rights and extraction in the locality.

58 Water quality management

- (1) The beneficial uses of the Dorrigo Basalt Groundwater Source are raw water drinking and ecosystem protection, based on the Australian and New Zealand Environment and Conservation Council *Water Quality Guidelines 2001*, and the National Health and Medical Research Council *Raw Water for Drinking Purposes Guidelines 1996*.
- (2) Water quality decline will be deemed unacceptable if extraction is likely to cause water quality to decline to a lower beneficial use class.

Note. It is not recommended that the water from this groundwater source be consumed directly without prior treatment. Land use activities may have polluted the groundwater in some areas.

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- (3) The Minister may declare that, in order to protect water quality within this groundwater source, local access rules are to apply in a defined area, known as a local impact area.
- (4) If water quality declines are resulting from extraction, extraction from all water supply works (bores) nominated by an access licence within a local impact area declared under subclause (3) will be restricted to such an extent and for such a time as required to halt that decline, or restore the beneficial use of this groundwater source.
- (5) Construction of a new water supply work (bore) will not be permitted:
 - (a) within 250 metres of a contamination source, unless the proponent can demonstrate to the Minister's satisfaction that a lesser distance will result in no more than minimal harm to this groundwater source, and that extraction will not impact on the environment or cause a threat to public health as advised by the Minister for Health, or
 - (b) within a greater distance than in subclause (a) nominated by the Minister in order to ensure that no more than minimal harm will occur to this groundwater source, and that extraction will not impact on the environment or cause a threat to public health as advised by the Minister for Health.
- (6) Subclause (5) will not apply if the water supply work (bore) is sealed off to the nearest impervious layer with an impermeable seal constructed within the bore, as specified by the Minister.

59 Protection of groundwater dependent ecosystems

- (1) Extraction of groundwater of greater than 20 ML/yr will not be permitted from a water supply work (bore) within 100 metres of a high priority groundwater dependent ecosystem.
- (2) Extraction of groundwater greater than 20 ML/yr shall only be permitted from a water supply work (bore) 100 metres to 200 metres from a high priority groundwater dependent ecosystem, if there is no drawdown outside the natural variation at the margin of the groundwater dependent ecosystem.
- (3) Extraction of groundwater of less than 20 ML/yr from a water supply work (bore) nominated by an access licence, and pursuant to basic landholder rights, will not be permitted within 40 m from high priority groundwater dependent ecosystems.
- (4) Subclauses (1) to (3) do not apply to:
 - (a) extraction from an existing water supply work (bore),
 - (b) extraction from a new water supply work (bore) sealed off to the nearest impervious layer with an impermeable seal constructed within the bore as specified by the Minister, and
 - (c) extraction for monitoring of groundwater quantity, quality and levels.
- (5) Extraction of groundwater from any water supply work (bore) is excluded within 40 metres of a river, unless:
 - (a) the extraction is from an existing water supply work (bore), or
 - (b) the extraction is for monitoring of groundwater quantity, quality and levels.

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- (6) High priority groundwater dependent ecosystems are listed in Schedule 8.
- (7) Pursuant to section 42 (2) of the Act, the Minister may identify further high priority groundwater dependent ecosystems and include them in Schedule 8 in year 6 of this Plan based on further studies of groundwater ecosystem dependency undertaken by the Minister.
- (8) The Minister should consult with the Minister for the Environment before adding further high priority groundwater dependent ecosystems to Schedule 8.
- (9) Extraction by an existing water supply work (bore) nominated by an access licence located within the exclusion zones as established in subclauses (1), (2), (3), and (5) cannot increase their access licence share component through a dealing unless the licence holder can demonstrate to the Minister there will be no impact on the high priority groundwater dependent ecosystems or any river.

60 Extraction restrictions

The Minister may, in the event of local impact restrictions arising from this Division, impose by Order, a reduction in annual, quarterly, monthly, weekly or daily extraction rates from water supply works (bores) in the affected area.

61 Group registration

This Plan allows for the formation of a group of access licences within this groundwater source with respect to the sharing of local impact restrictions arising from this Division, subject to the following rules:

- (a) the group register will be maintained by the Minister,
- (b) holders of access licences must make a request to the Minister to form a group,
- (c) total extraction by all access licences within a group will be assessed as a whole against their combined restricted extraction and must not exceed that amount,
- (d) no access licence holder within the group may extract more than is permitted by Division 2 of this Part in any one water accounting year as a result of participation in a group,
- (e) an access licence holder may apply to be removed by the Minister from the group and the extraction by the group will be reduced by the extraction restriction of that access licence,
- (f) an access licence holder may apply to be added by the Minister to the group and the combined restricted extraction of the group will be increased by the extraction restriction of that access licence holder, and
- (g) the Minister reserves the right to remove a licence holder from a group where that individual causes the group extraction restriction to be exceeded, or to dissolve a group where its members exceed their combined extraction restriction.

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62 Infrastructure failure in this groundwater source

- (1) The operational rules relating to local impact management may rely on water levels at specified monitoring bores.
- (2) In the event of a monitoring bore failure the Minister may:
 - (a) continue with the current access rules until the monitoring bore is reinstated,
 - (b) adjust the current access rules based on climatic conditions and any other monitoring bore information, until the monitoring bore is reinstated, or
 - (c) rely on another monitoring bore in the area to provide information.

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Part 11 Access licence dealing rules

63 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

Note. The Minister's access licence dealing principles are contained in Appendix 4.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. There are a number of mechanisms within the Act, called access licence dealings, to change either the ownership of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised. These dealings are governed by the principles in section 5 of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

64 Rules relating to constraints within this surface water source

- (1) This clause applies to any relevant dealings under sections 71D, 71F and 71J of the Act, and with respect to water allocation assignments within this surface water source under section 71G of the Act.

- (2) Dealings are prohibited under this clause if:

- (a) any of the access licences or water allocations involved are not within this water source, unless the dealing is permitted under clause 70,

Note. Clause 67 relates to any dealings that involve an access licence moving from one water source to another.

- (b) the dealing would result in the access licence extraction component nominating a work in a different management zone,
- (c) the dealing would result in additional access licence share components in Zone 2,
- (d) the dealing would result in additional access licence share components in any exclusion zone within Zone 2, shown on the map in Schedule 9,
- (e) the dealing would result in the access licence extraction component that had previously nominated a work outside of the an exclusion zone in Zone 2, nominating a work inside of the an exclusion zone in Zone 2,
- (f) the dealing would result in the access licence extraction component that had previously nominated a work inside one of the exclusion zones in Zone 2, nominating a work inside another of the exclusion zones in Zone 2, or
- (g) the dealing results involves the assignment of local water utility very low flow access.

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65 Rules relating to constraints within this groundwater source

- (1) This clause applies to any relevant dealings under sections 71D, 71F, and 71J of the Act, and section 71G of the Act with respect to allocation assignments within a groundwater source.
- (2) Dealings are prohibited under this clause if:
 - (a) any of the access licences or water allocations involved are not within this groundwater source, or
 - (b) the dealing would result in the total extraction under access licences through nominated works in the area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 10 Division 4 of this Plan.

66 Rules for access licence dealings which alter the times, rates or circumstances specified in access licence extraction components

Notwithstanding clauses 64 and 65, applications under section 71F of the Act to vary the times, rates or circumstances specified in an access licence with respect to the taking of water under the licence are prohibited.

67 Rules for change of surface water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.
- (2) Dealings under section 71E of the Act that change the surface water source to which an access licence applies are prohibited in this surface water source, unless provided for in this clause.
- (3) An access licence with a share component specifying this surface water source may be cancelled and a new licence issued in another surface water source only if:
 - (a) the new access licence issued is within this Unit, and
 - (b) the access licence dealing rules in the other surface water source permit such a dealing.
- (4) An access licence with a share component specifying another surface water source may be cancelled and a new licence issued in this surface water source only if:
 - (a) the access licence cancelled is within this Unit, and
 - (b) the access licence dealing rules in the other surface water source permit such a dealing.
- (5) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled access licence share component.
- (6) The extraction component of the cancelled access licence is not to be carried over to the new access licence.
- (7) Dealings under section 71E of the Act that change the water source to which an access licence applies are prohibited in this groundwater source.

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68 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) In this surface water source, conversion of an access licence of one category to an access licence of another category may be permitted only if the conversion is from an unregulated river access licence to a runoff harvesting access licence.
- (3) In this surface water source, the volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.
- (4) Dealings that result in conversion of an access licence of one category to an access licence of another category are prohibited in this groundwater source.

69 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of these water sources are prohibited.

70 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71G of the Act, in relation to water allocation assignments between water sources.
- (2) Dealing under section 71G of the Act that result in water allocation assignments to or from access licences in these water sources are prohibited unless provided for in this clause.
- (3) Dealings that assign water allocations between access licences inside this surface water source and access licences outside this surface water source, but inside this Unit, are permitted only if the access licence dealing rules in the other water source permit such a dealing.
- (4) Dealings that assign water allocations between access licences inside this surface water source are permitted.
- (5) Dealings that assign water allocations between access licences inside this groundwater source are permitted, subject to clause 65.
- (6) Dealings that assign water allocations between access licences in other water sources and access licences in this groundwater source are prohibited.

Note. Each water allocation assignment must be applied for. Licence holders may enter into private contracts to assign water allocations for a number of years. Such contracts are not guaranteed by the Government, and approval must be sought annually. Approval will be subject to the rules in this Plan, including local impact assessment.

71 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.

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- (2) Dealings that result in interstate assignment of water allocations to or from these water sources are prohibited.

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Part 12 Mandatory conditions

72 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
- (2) In this surface water source, all access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence, including IDELs arising from the operation of Part 10 Division 3 of this Plan where applicable, and the variation thereof,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to the water allocation account management rules established in Part 10 Division 2 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account,
 - (f) the requirement that water may only be taken under the access licence by the water supply work nominated by the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.
- (3) In this groundwater source, all access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence,
 - (c) the requirement that all taking of water under the access licence will be subject to the available water determinations,
 - (d) the requirement that all taking of water under the access licence will be subject to any local impact management restrictions established in this Plan,
 - (e) the requirement that all taking of water under the access licence will be subject to the account management rules established in this Plan,
 - (f) the requirement that water may only be taken under the access licence by the water supply work (bore) nominated by the access licence,
 - (g) the taking of water in accordance with the access licence may only occur if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account, and
 - (h) any other conditions required to implement the provisions of this Plan.

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73 Very low flow access conditions in the surface water source

- (1) Until the end of year 5 of this Plan, holders of access licences on Schedule 7 in the surface water source, may continue to access the very low flows for the purposes of cleaning of dairy plant and equipment for the purposes of hygiene.
- (2) The maximum volume that can be extracted under subclause (1) is the minimum amount required to satisfy the purposes in that subclause, and will be specified on each access licence.
- (3) If any access licence listed on Schedule 7 is surrendered, cancelled, is not renewed, or is subject to a dealing under Part 11 of this Plan, then it will be removed from the Schedule.

74 Unregulated river access licences

All unregulated river access licences in this surface water source shall have mandatory conditions to give effect to the following:

- (a) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group, and
- (b) notwithstanding subclause (a), water may be taken without any restrictions in rate from an in-river dam while the dam is passing flows up to the equivalent of A class flows at the dam site, or there is zero inflow.

75 Local water utility access licences

All local water utility access licences in this surface water source shall have mandatory conditions to give effect to the following:

- (a) Holders of local water utility surface water access licences in Zone 2 issued at the start of this Plan, may continue to access the very low flows for the purpose specified in subclause (c) (i),
- (b) the total amount of water extracted from Zone 2 of this surface water source under the subclause (1) shall be the minimum amount necessary and shall not exceed 1.5 ML/day,
- (c) water may only be taken for the purposes of supplying water for:
 - (i) the exercise of a water supply function of the local water utility, and/or
 - (ii) other such purpose provided for under the Act,
- (d) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, and
- (e) notwithstanding subclause (d), water may be taken without any restrictions in rate from an in-river dam while the dam is passing flows up to the equivalent of A class flows at the dam site, or when there is zero inflow.

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76 Domestic and stock access licences

All domestic and stock access licences in this surface water source shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing flows up to the equivalent of A class flows at the dam site, or there is zero inflow, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

77 Runoff harvesting access licences

All runoff harvesting access licences in this surface water source shall have a mandatory condition imposed on them specifying that water may be taken without restriction in rate, but only from the specified work.

78 Unregulated river and aquifer (Aboriginal cultural) access licences

All unregulated river and aquifer (Aboriginal cultural) access licences in these water sources shall have mandatory conditions to give effect to the following:

- (a) water shall only be taken for Aboriginal personal, domestic and communal purposes including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, hunting, fishing, and gathering, and for recreational, cultural and ceremonial purposes,
- (b) water may only be taken in this surface water source in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing flows up to the equivalent of A class flows at the dam site, or when there is zero inflow, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

79 Unregulated river (research) and aquifer (research) access licences

All unregulated river (research) and aquifer (research) access licences in these water sources shall have mandatory conditions to give effect to the following:

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- (a) water shall only be taken for the purpose of scientific research, experimentation or teaching by accredited tertiary institutions, government bodies or other approved organisations, where any primary production resulting from the research program is not sold for profit,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all flows up to the equivalent of A class flows at the dam site or when there is zero inflow, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

80 Unregulated river (Aboriginal commercial) access licences

The following conditions shall be imposed on unregulated river (Aboriginal commercial) access licences:

- (a) water shall only be taken by, or on behalf of, Aboriginal communities or Aboriginal persons,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by a registered group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all flows up to the equivalent of A class flows at the dam site or when there is zero inflow, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the licence specifies that water may only be taken from a runoff harvesting dam.

81 Mandatory conditions on water supply works approvals

- (1) All approvals for water supply works in this surface water source shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) flow measurement devices:
 - (i) shall be installed and maintained on all works used for extraction of water under a surface water access licence, and
 - (ii) shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
 - (b) water extraction and property water management infrastructure details shall be provided to the Minister on request,

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- (c) it is the responsibility of the work approval holder to ascertain from the Minister the flow class at any time before commencing to take water under an access licence with an IDEL,
 - (d) notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is not permitted if there is no visible flow in the river in the vicinity of the work,
 - (e) extraction under an access licence through an approved work is only authorised with respect to the work nominated by the access licence, and
 - (f) approvals for in-river dams must include a condition requiring the passing of such flows as the Minister determines to be appropriate to achieve the objectives of this Plan.
- (2) All approvals for a water supply work (bore) in this groundwater source shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
- (a) the water supply work (bore) is only to be constructed by a driller licensed under section 349 of the Act,
 - (b) the water supply work (bore) must comply with drilling standards as specified by the Minister,
 - (c) construction of a water supply work (bore) must prevent contamination between aquifers through proper bore construction,
 - (d) a water supply work (bore) approval holder must ensure decommissioning procedures comply with applicable standards as specified by the Minister,
 - (e) a new or replacement water supply work (bore) to access water for basic rights will be required, as a condition of approval, to be constructed to sufficient depth to maintain access to the water source for the life of the work,
 - (f) the water supply work (bore) approval holder is, within 2 months of completion of the work, or after the issue of the approval if the water supply work (bore) is existing, to provide the Minister with:
 - (i) details of the work on the prescribed form,
 - (ii) a plan showing accurately the location of the work in relation to portion and property boundaries, and
 - (iii) details of any water analysis and/or pumping tests required by the Minister,
 - (g) if during the construction of the water supply work (bore), saline or contaminated water is encountered above the producing aquifer, such water is to be sealed off by:
 - (i) inserting the appropriate length(s) of casing to a depth sufficient to exclude the saline or contaminated water from the work, and
 - (ii) placing an impermeable seal between the casing(s) and the walls of the bore hole from the bottom of the casing to ground level, as specified by the Minister,

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- (h) if a water supply work (bore) is abandoned, the water supply work (bore) approval holder is to:
 - (i) notify the Minister that the work has been abandoned, and
 - (ii) seal off the aquifer by backfilling the work to ground level after withdrawing the casing (lining), as specified by the Minister,
- (i) an extraction measurement device shall be installed and maintained on each water supply work (bore) used for extraction of water under an access licence, and such devices shall be of a type, and shall be maintained in a manner, which is acceptable to the Minister,
- (j) a water supply work (bore) must comply with the relevant local impact management rules in Part 10 of this Plan,
- (k) notwithstanding the available water determination, it is the responsibility of the water supply work (bore) approval holder to ascertain from the Minister whether or not there are in place any local impact restrictions before commencing to take water from this groundwater source,
- (l) extraction under an access licence through the approved water supply work (bore) is only authorised with respect to the access licences specified on the water supply work (bore) approval,
- (m) a water supply work (bore) approval holder must supply to the Minister on request, and to the required standards, a report pertaining to the quality of the water obtained from the water supply work (bore), and
- (n) any other conditions required to implement the provisions of this Plan.

Note. It is recommended that the Minister also apply conditions to water use approvals requiring the supply of information on an annual basis on types and areas of irrigated crops.

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Part 13 Granting and amending water supply works approvals

82 Granting and amending water supply works approvals

This Part is made in accordance with section 21 (b) of the Act.

83 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence share component specifying the runoff harvesting dam as the nominated work.
- (2) When the water allocations that may be taken from a runoff harvesting dam are reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 11 of this Plan, the Minister may impose an additional condition requiring the dam to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the dam to be reduced, consistent with the reduction in water allocations available.

Note. Extraction of water from a runoff harvesting dam requires a runoff harvesting access licence, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required. Runoff harvesting is a category of access licence to be established by regulation under section 57 (k) of the Act.

84 In-river dams

The Minister may consider applications for in-river dams on permanently flowing first and second order rivers within this surface water source.

Note. Taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act.

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Part 14 Monitoring and reporting

85 Monitoring and reporting of performance indicators

The monitoring and reporting of the performance indicators specified in clause 13 shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with a water management committee where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the Implementation Program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program will be included in the annual report for the Department.

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Part 15 Amendment of this Plan

86 Amendment of this Plan

This Part is made in accordance with section 42 (2) of the Act.

87 Amendment of very low flow provisions

- (1) The Minister may, under section 42 (2) of the Act and by notice published in the NSW Government Gazette, vary the very low flow levels established in clause 17, and consequently the bottom of A class established in clause 17, following field verification.
- (2) Any variation made under subclause (1) should not result in the very low flow level being less than that stipulated in clause 17 and no greater than:
 - (a) 109 ML/day in Zone 1,
 - (b) 36 ML/day in Zone 2,
 - (c) 20 ML/day in Zone 3, or
 - (d) 27 ML/day in Zone 4.
- (3) The Minister should undertake the field verification in subclause (1) as part of the review of this Plan under section 43 (2) of the Act.
- (4) The field verification should assess the degree to which the following objectives of the *Water Quality and River Flow Interim Environmental Objectives* (NSW Government 1999) are met:
 - (a) Objective 1 - to protect water levels in natural river pools and wetlands during periods of no flow, and
 - (b) Objective 2 - to protect natural low flows.
- (5) In undertaking the field verification the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) cause a report to be prepared documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the field results and conclusions in terms of the degree to which the objectives in subclause (4) are met,
 - (iv) the flow level recommended to meet the objectives in subclause (4), and
 - (v) the socio-economic impacts of the recommended changes to the flow level, including farm dam feasibility, availability of funding and other adjustment mechanisms, barriers to change for access licence holders and ecological implications.

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88 Review of field verification

- (1) The Minister should seek advice from a review body on the field verification report specified in clause 87 (5) (b) before varying this Plan in accordance with clause 87 (1), if the field verification recommends a variation in the very low flow levels established in clause 17.
- (2) This review body may be:
 - (a) a water management committee with water sharing responsibilities for this surface water source if one exists,
 - (b) an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a water management committee referenced at subclause (2) (a), or
 - (c) if there is no water management committee with water sharing responsibilities for this surface water source, then by a catchment management board with responsibilities for this surface water source or an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a catchment management board.
- (3) The review body should provide advice to the Minister on the field verification report, and advise on any changes to the recommendations contained in the report in relation to any variation of the very low flow levels.
- (4) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date at the latest.

89 Other amendment of this Plan

This Plan may also be amended in accordance with the following clauses of this Plan:

- (a) clause 22 in respect to environmental health water,
- (b) clause 37 in respect to long-term average extraction limit of the surface water source,
- (c) clause 38 in respect of the long term extraction limit of the groundwater source,
- (d) clauses 51 and 52 in respect to adjustment of TDEs and IDEs, and
- (e) clause 59 in respect to high priority groundwater dependent ecosystems.

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

abandoned (work) refers to a water supply work (bore) that is no longer being used.

available water in relation to a water management area or water source, is the water that is available in that area or water source in accordance with an available water determination that is in force in respect of that area or water source.

available water determination is a written Order by the Minister as to the availability of water for the various categories of access licence in relation to a specified water management area or water source.

Note. An available water determination gives rise to a water allocation that is credited to a water allocation account for each licensed holder.

conversion factor refers to the adjustment factor that is to be applied to an access licence share component when it is cancelled in one water source, and reissued in a different water source and visa versa, or when the access licence is converted from one category to another. It is designed to provide for the fact that the value of a unit of share component in terms of the average water allocations that result from it may vary from one water source to another, or from one category to another.

drawdown refers to a lowering of the level to which water will rise in cased bores. Natural drawdown may occur due to seasonal climatic changes. Groundwater pumping may also result in seasonal and long-term drawdown.

extraction limit is:

- (a) in relation to this groundwater source, the amount of the long-term average annual recharge and storage that can be extracted, on average, each water accounting year, and
- (b) in relation to this surface water source, a limit on the amount of water that may be extracted from an extraction management unit.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs. See also **in-river dam** and **runoff harvesting dam**.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) very low flows may be a class on their own,
- (b) low flows may be categorised as 'A' class flows,
- (c) moderate flows may be categorised as 'B' class flows,
- (d) high flows may be categorised as 'C' class flows,
- (e) very high flows may be categorised as 'D' class flows, and
- (f) extremely high flows may be categorised as 'E' class flows.

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

groundwater is water that occurs beneath the ground surface in the saturated zone.

groundwater dependent ecosystems are ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater.

Healthy Rivers Commission is an independent Commission set up by the NSW Government in 1996 to undertake public Inquiries and make recommendations on selected NSW rivers systems.

individual daily extraction limit (IDEL) is the volume of water that may be extracted by an individual access licence from an unregulated river on a daily basis from a particular flow class.

infrastructure includes, but is not limited to, a:

- (a) flow gauging device or any other appliance that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated,
- (b) flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within this surface water source, or
- (c) a monitoring bore.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher order rivers are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a “river” gazetted 23rd March 2001. See also **farm dam** and **runoff harvesting dam**.

management zone is an area within the surface water source in which daily extraction limits may be defined or where dealing restrictions are approved. Management zones may be designated where the surface water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area. They may also be designated where local dealing restrictions are in place.

monitoring bore refers to a bore constructed for the purpose of measuring water levels and/or taking samples for water quality analysis

recharge is the addition of water, usually by infiltration, to an aquifer.

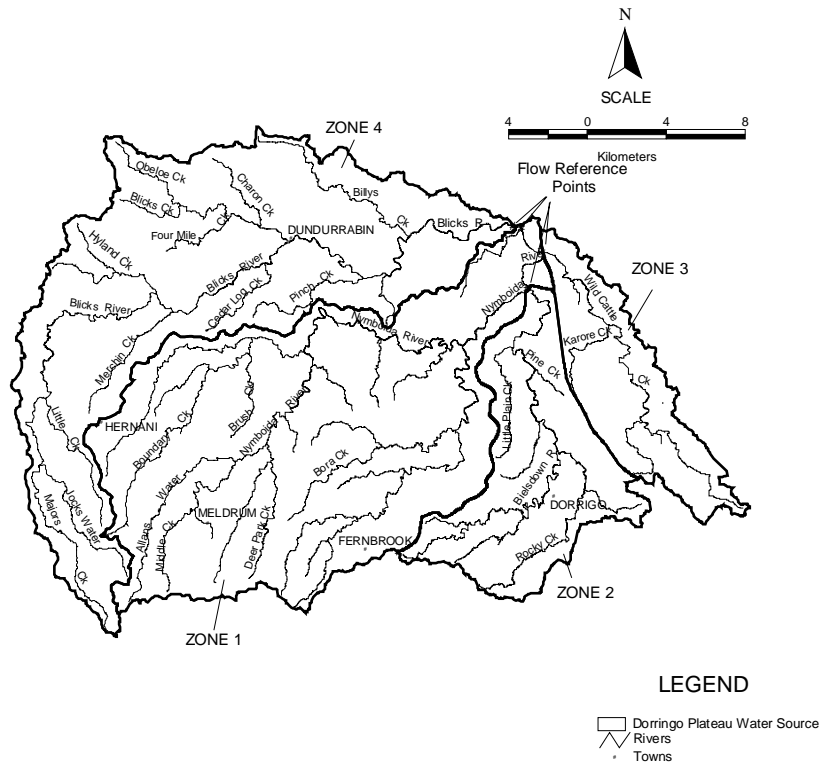
runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a river gazetted 23rd March 2001. See also **farm dam** and **in-river dam**.

Note. This order refers to watercourses shown as blue lines on topographic maps. The lines which are uppermost in a catchment are 1st order streams, when two 1st order streams are joined they make a 2nd order stream, etc. For more information see the Farm Dams Assessment Guide available from the Department of Land and Water Conservation.

total daily extraction limit (TDEL) is the volume of water that may be extracted under access licences from an unregulated river on a daily basis from a particular flow class.

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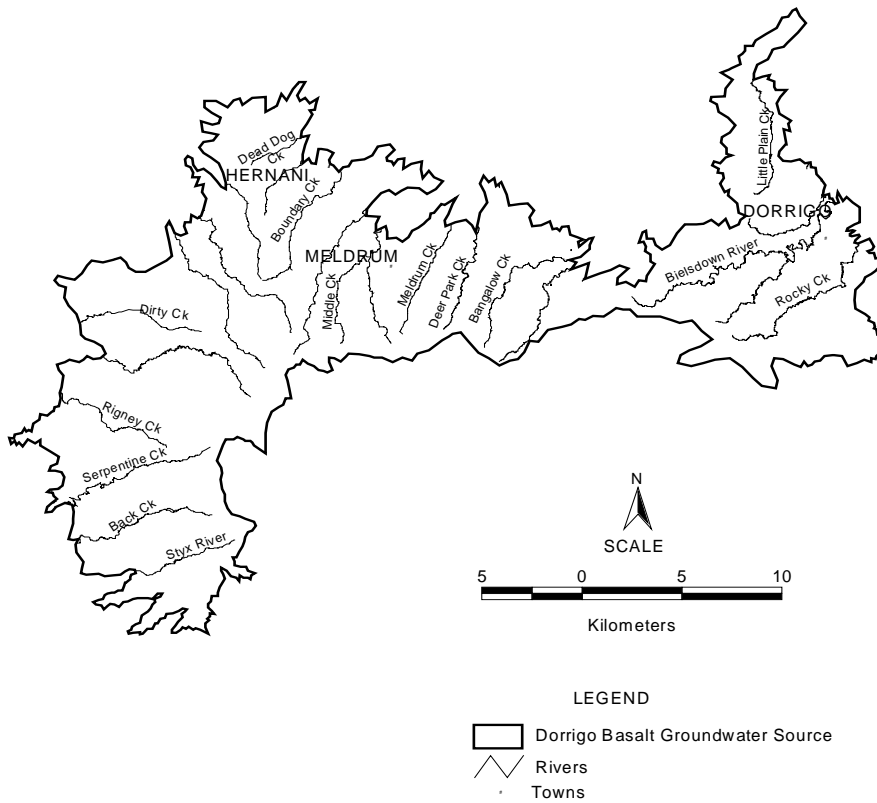
Schedule 2 Dorrigo Plateau Surface Water Source



Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Schedule 3 Dorrigo Basalt Groundwater Source

This groundwater source excludes all water occurring on the land surface.



Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Schedule 4 Rivers in the Dorrigo Plateau Surface Water Source

This surface water source includes, but is not limited to:

Zone 1

Upper Nymboida River

Boundary Creek

Borra Creek

Little Murray Creek

Sandy's Creek

Glen Fernaigh River

Dead Dog Creek

Zone 3

Wild Cattle Creek

Karore Creek

Kirtons Creek

Currens Creek

Zone 2

Bielsdown River

Rocky Creek

Little Plains Creek

Little Falls Creek

Euroka Creek

Matthews Creek

Whisky Creek

Dillions Creek

Zone 4

Blicks River

Hyland Creek

Blicks Creek

Billys Creek

Majors Creek

Pinch Creek

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Schedule 5 Contribution to relevant targets in the December 2002 State Water Management Outcomes

Levels of assessed contribution:

FULL – contributes to the target in full

HIGH - while not fully contributing to the target, there is a good level of contribution

PARTIAL - goes some way to contributing to the target

LOW - only small degree of contribution to the target

Relevant target	Level of contribution	Comments
Target 1c Long term average annual extraction limits which are ecologically sustainable, and which minimise downstream impacts, established in all coastal water sources	HIGH	<ul style="list-style-type: none"> This Plan clearly sets out the basis for the surface water extraction limit for the Nymboida River Catchment Extraction Management Unit. Until the cumulative impact of this limit can be assessed for all the whole Nymboida Catchment it is not possible to properly assess ecological sustainability and downstream impacts.
Target 1e The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency	FULL	<ul style="list-style-type: none"> This Plan establishes an extraction limit (sustainable yield) of 10% of average annual recharge. This Plan provides for an increase in the extraction limit to 12.5% of recharge when extractions reach the SY and an assessment is undertaken.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon	FULL	<ul style="list-style-type: none"> Rules set out in Part 9.
Target 2 All management plans incorporating mechanisms to protect and restore aquatic	PARTIAL	<ul style="list-style-type: none"> Daily extraction limits protect a high proportion (80%) of the flow regime, excepting the low flows in Zone 2 which

 Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

<p>habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes</p>		<p>will nevertheless be improved from the current.</p> <ul style="list-style-type: none"> • Only extremely low flows (generally around the 98th percentile of all days with flow) are protected by the cease/commence to pump figures. • As this Plan will allow low to high flows in Zone 1, 3 and 4, and moderate to high flows in Zone 2, to be further diminished relative to current, the aquatic habitats may decline to some degree in the future. However the total volume of extraction is low. • Given that this surface water source has been identified as potential high conservation value these values may be at some risk from growth in extractions • The low groundwater extraction limit, and limits on extraction within 100m of designated groundwater dependent ecosystems should protect these habitats.
<p>Target 4a Wherever the frequency of “end of system” daily flows would be less than 60 percent of the predevelopment level without environmental water rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent of the predevelopment frequency</p>	<p>HIGH</p>	<ul style="list-style-type: none"> • The target is met in all classes in all zones as follows: <ul style="list-style-type: none"> • Zone 1: 87% of A class flows protected; 88% of B class flows protected; 90% of C class flows protected. • Zone 2: 40% of A class flows protected, which is more than 10% improvement on current; 60% of B class flows protected; 70% of C class flows protected. • Zone 3: 80% of A class flows protected; 80% of B class flows protected; 80% of C class flows protected. • Zone 4: 80% of A class flows protected; 80% of B class flows protected; 80% of C class flows protected.
<p>Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • The target is not met in any zone in the first five years. • However this Plan provides for a review of the cease/commence to pump figures in all zones in year 5 and a possible change in year 6.

 Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

assessments, protection extended up to at least the predevelopment 95th percentile		
Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components	FULL	<ul style="list-style-type: none"> • This Plan clarifies access licence share components, limits interference between groundwater licences and establishes individual daily extraction limits for distribution to individual surface water licences. • This Plan enables trading of share components and individual daily extraction limits.
Target 6a For groundwater sources, the total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 125 percent of the Sustainable Yield	FULL	<ul style="list-style-type: none"> • Total groundwater access licence share components for this groundwater source will not exceed 100% of the SY.
Target 6b For surface water sources, a pathway for reducing the share components to 200 percent of the long term average annual extraction limit to be established not later than the end of the term of the SWMOP	FULL	<ul style="list-style-type: none"> • Total access license share components for the Nymboida River Catchment Extraction Management Unit should not exceed 200% of extraction limit for this Unit.
Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy	HIGH	<ul style="list-style-type: none"> • The Government has established alternative mechanisms to address this target. • This Plan provides market opportunities. • This Plan provides an exemption from embargo for Aboriginal cultural purposes. • Unallocated water is available in this surface water source and may be assigned to any licences issued to Aboriginal cultural purposes. • Aboriginal peoples may apply for aquifer access licences in this groundwater source. • This Plan provides for priority of access to unassigned TDEL following the 5 year review for use by the Aboriginal community.
Target 8 Daily extraction components specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80	FULL	<ul style="list-style-type: none"> • This Plan establishes total daily extraction limits across the whole surface water source.

 Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

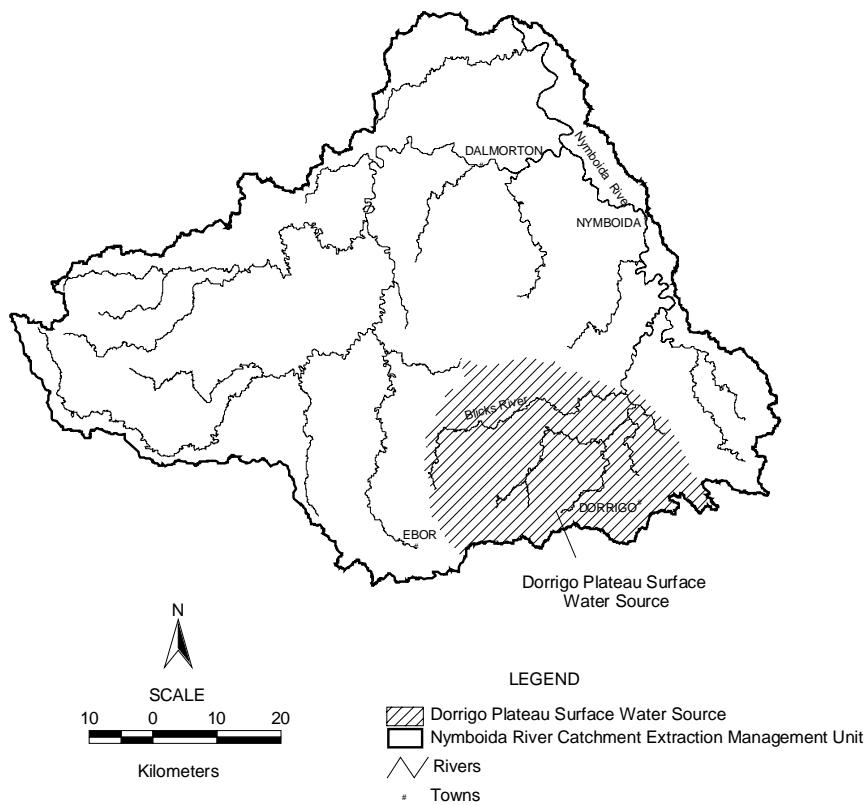
percent of stressed unregulated rivers		
Target 10 Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved	HIGH	<ul style="list-style-type: none"> Baseflows to surface rivers are protected by a 40m exclusion zone and a low groundwater extraction limit.
Target 11 Groundwater dependent ecosystems identified and mapped for all priority aquifers, and the ecological water requirements assessed to enable local groundwater extraction rates and/or Sustainable Yields to be reviewed	HIGH	<ul style="list-style-type: none"> High priority groundwater dependent ecosystems have been identified but detailed ecological water requirements are not known. This Plan sets out extraction rules/buffer zones to limit local environmental impacts of extraction on these ecosystems.
Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use	FULL	<ul style="list-style-type: none"> This Plan has identified the volumes necessary to meet basic domestic and stock requirements. Cease to pump level and daily extraction limits will protect surface flows for domestic and stock requirements.
Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed	HIGH	<ul style="list-style-type: none"> 2 Aboriginal community representatives have been involved in development of this Plan.
Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them	HIGH	<ul style="list-style-type: none"> This Plan recognises importance of these water sources to Aboriginal cultural and spiritual values and has recognised specific Aboriginal cultural or traditional requirements and sites of particular importance, although has not listed them for reasons of cultural sensitivity. This Plan, while protecting over 80% of most flows does allow future reductions in flow compared to current and the impact of this on Aboriginal values is not known.
Target 16a All share components of access licences tradeable	FULL	<ul style="list-style-type: none"> This Plan provides for trading of access licence share components and individual daily extraction limits.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access	FULL	<ul style="list-style-type: none"> This Plan establishes exchange rate of 1:1 for trading between surface water sources in the Nymboida River Catchment Extraction Management Unit. This Plan does not permit trading of

 Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

and environmental water		groundwater rights to other groundwater sources, but this is justifiable as they are unconnected.
Target 16d Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery	FULL	<ul style="list-style-type: none"> This Plan does not impose reduction factors.
Target 16e Any unassigned access rights identified and clear mechanisms established for their future assignment	FULL	<ul style="list-style-type: none"> This Plan establishes rules for assignment of unassigned access rights.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	FULL	<ul style="list-style-type: none"> This Plan establishes trading zones in this surface water source.
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries	FULL	<ul style="list-style-type: none"> This Plan includes a generalised water quality objective for surface water and groundwater. This Plan does provide a reasonably high level of environmental protection that should assist in protecting water quality.

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Schedule 6 Nymboida River Catchment Extraction Management Unit



Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Schedule 7 Water licences with very low flow access conditions

30SL015307
30SL027262
30SL037676
30SL038131
30SL041519
30SL041634
30SL043081
30SL049636
30SL050242
30SL052200
30SL065195
30SL065929
30SL066477
30SL066261
30SL066256
30SL066254
30SL066515
30SL066475
30SL066201
30SL066466
30SL066206
30SL066241
30SL066260

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Schedule 8 High priority groundwater dependent ecosystems

The high priority groundwater dependent ecosystems in this groundwater source are:

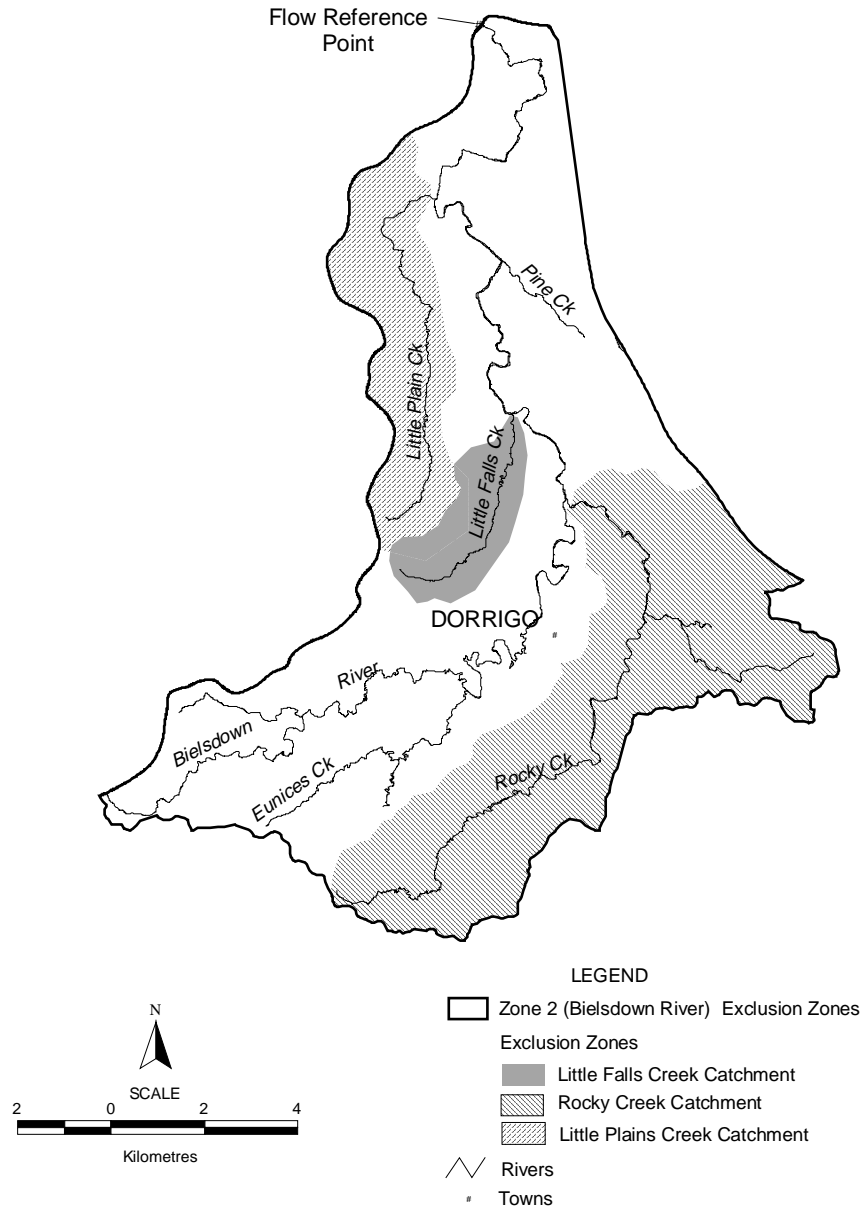
Rainforests
Riparian forests
Moist eucalypt forest
Moist heathy vegetation, and
Freshwater wetlands,

as detailed in *Water Habitats of the Clarence, Coffs Coastal, and Bellinger Catchments. North Coast Water Habitats Study – Report No.2* National Parks and Wildlife Service, 2001.

Note. The high priority groundwater dependant ecosystems listed in this Schedule may change during the period of this Plan. The offices of the Department of Land and Water Conservation, listed in Appendix 2, should be contacted for a current list.

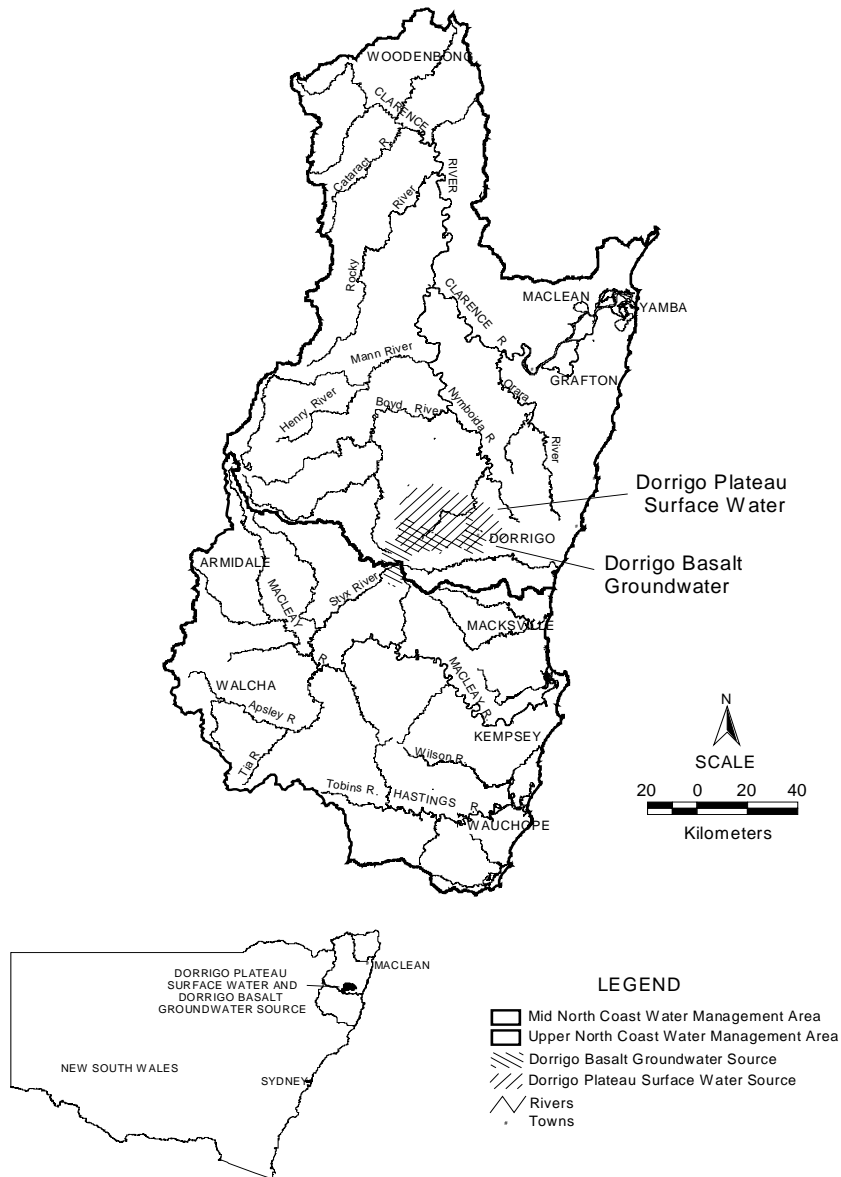
Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Schedule 9 Trading exclusion zones within Zone 2 – Bielsdown River



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Appendix 1 Upper North Coast and Mid North Coast Water Management Areas



Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Appendix 2 Location of maps

The maps in relation to this Plan may be inspected at:

Regional Office
Department of Land and Water Conservation
76 Victoria Street
GRAFTON NSW 2460

District Office
Department of Land and Water Conservation
205 AMP Centre
Cnr Gordon and Vernon Streets
COFFS HARBOUR NSW 2450

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Appendix 3 Performance indicators

Performance indicators for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
(a) Change in groundwater extraction relative to the extraction limit.	11 (a)	<ul style="list-style-type: none"> Average annual extraction volume for the groundwater source as a percentage of the extraction limit (commonly known as Sustainable Yield). 	<ul style="list-style-type: none"> Plan provisions will set the mechanism to remain within the sustainable yield over the long-term.
(b) Change in low flows at end of system.	11 (c) 11 (d) 11 (g) 11 (h)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> River Flow Objectives (RFOs) 1, 2 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every objective is relevant to every river in NSW. Plan will contribute to a decrease in the frequency and duration of low flows. This assessment will focus on end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(c) Change in moderate to high flows at end of system.	11 (c) 11 (d) 11 (g) 11 (h)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> RFO 3. Plan will maintain or increase the frequency and duration of moderate to high flows. This assessment will focus on end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(d) Change in local water utilities and major water utilities access (where those utilities are	11 (e)	<ul style="list-style-type: none"> Change in safe yield (<i>safe yield</i> is the annual demand that can be supplied from the surface water supply headworks and is based on the period 	<ul style="list-style-type: none"> Water sharing plans for unregulated water sources have the potential to impact on urban water supplies.

 Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Performance indicators for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
involved in urban water provision).		of records used and an acceptable level of restriction). <ul style="list-style-type: none"> • Consumption of town water supply per capita of population over time. 	
(e) Change in ecological condition of these water sources and their dependent ecosystems.	11 (a) 11 (b) 11 (c) 11 (d) 11 (g) 11 (h)	<ul style="list-style-type: none"> • Periodic assessment of identified indicators for ecological condition. • Change in presence and abundance of highly water dependent threatened species due to flow. 	<ul style="list-style-type: none"> • Water sharing plans are limited to providing for changes in flow regime aimed at improving the conditions for the ecological condition of the river. • There are many other factors that contribute to ecological objectives. • The focus of this performance indicator will be the effect of flow strategies. Assessment of ecological condition should be based largely on hydrologic parameters (eg wetted area, depth in pools and velocity). This attempts to exclude external non-water sharing plan related factors (eg climate and catchment landuse changes).
(f) Extent to which basic landholder rights requirements have been met.	11 (e)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. • Monitor increase in applications for water supply work (bore) approvals. • Number of reports of interference between high yield extraction and basic rights, or number of stock and domestic bores deepened. 	<ul style="list-style-type: none"> • Basic landholder rights usage figures in water sharing plans are estimated (not actual use). • Increase in groundwater licences may be due to past unlicensed works.
(g) Change in economic benefits derived from water	11 (f)	<ul style="list-style-type: none"> • Number of days access provided. • Percentage change in number and volume of 	<ul style="list-style-type: none"> • There are many factors affecting economic status of a region, for example commodity prices. • Measurement of the number of

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

Performance indicators for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
extraction and use.		farm dams. <ul style="list-style-type: none"> • Changes in patterns of water trading. • Change in surface and groundwater use per sector. 	farm dams will attempt to identify the impact of the plan's provisions.
(h) Extent to which native title rights requirements have been met.	11 (h)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. • Monitor increase in applications for water supply work (bore) approvals for native title basic rights. • Number of reports of interference between high yield extraction and native title rights holders, or number of bores deepened. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
(i) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	11 (h)	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. • The number of licence applications and transfers referred to the Local Aboriginal Land Councils and Gunbaingirr Elders. 	<ul style="list-style-type: none"> • The collection of information on values is considered the first step in addressing the objects of the Act. It would be expected that at the end of 5 years there should be relevant information collected for each water source, as a minimum requirement. • Consultation with the local Aboriginal community will seek to minimise effects on important social, customary, cultural, and spiritual values.
(j) Contribution to achievement of water quality to support the environmental values of these water sources.	11 (b)	<ul style="list-style-type: none"> • Change in the baseline figures of identified water quality variables. 	<ul style="list-style-type: none"> • Many factors may affect water quality that are not related directly to flow management.

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Appendix 4 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

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groundwater source means a water source specified in a groundwater management plan.

hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or
 - (b) the total volume of water allocations in water allocation accounts, or
 - (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

Water Sharing Plan for the Dorrigo Plateau Surface Water Source and the Dorrigo Basalt Groundwater Source 2003

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.
- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:

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- (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or
 - (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
- (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and

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- (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).

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- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or

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- (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or

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- (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
 - (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
 - (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
 - (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
 - (7) Conversion factors rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
 - (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
 - (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
 - (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or

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- (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
 - (a) if either of the access licences is suspended under section 78 of the Act, or
 - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
 - (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:

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- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.

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- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
- (a) if the access licence is suspended under section 78 of the Act, or
 - (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
- (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

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- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Water Sharing Plan for the Wybong Creek Water Source 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

 Water Sharing Plan for the Wybong Creek Water Source 2003

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Water Sharing Plan for the Wybong Creek Water Source 2003

Water Sharing Plan for the Wybong Creek Water Source 2003

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Wybong Creek Water Source 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* as amended (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement and term of this Plan

This Plan takes effect on 1 July 2003 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Hunter Water Management Area known as the Wybong Creek Water Source (hereafter **this water source**) as shown in Schedule 2.

Note. The Hunter Water Management Area is shown on a map in Appendix 1.

Note. Maps referred to in this Plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2.

- (2) This water source is divided into the following management zones shown on the map in Schedule 2:
 - (a) Wybong Creek and tributaries upstream of the Cuan Creek intersection and adjacent alluvial sediments (hereafter **Zone 1**),
 - (b) Wybong Creek and tributaries downstream of the Cuan Creek intersection and adjacent alluvial sediments (hereafter **Zone 2**), and
 - (c) Cuan Creek and tributaries and adjacent alluvial sediments (hereafter **Zone 3**).

Note. Access licence dealing rules are defined for each management zone.

5 Waters to which this Plan applies

- (1) The waters of this water source includes all water occurring on or below the land surface shown on the map in Schedule 2 including, but not limited to:
 - (a) all rivers in this water source including, but not limited to, those nominated in Schedule 3,
 - (b) all lakes and wetlands in this water source, and

Water Sharing Plan for the Wybong Creek Water Source 2003

- (c) the groundwater within all alluvial sediments below the surface of the land shown on the map in Schedule 2, excluding any groundwater contained in fractured rock aquifers and basement rocks in the area to which this Plan applies.

6 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.
- (2) Additional terms to those identified in subclause (1) are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible, the rules embodied in this Plan will apply to matters administered under the *Water Act 1912* in the interim.

8 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act, this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 4 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

Water Sharing Plan for the Wybong Creek Water Source 2003

Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

10 Vision

- (1) The vision for this Plan is a healthy, diverse and productive water source providing sustainable management of this water source for the community, environment, agriculture and industry.
- (2) This Plan also recognises the following respect statement for Aboriginal values in this water source:
 - (a) life-giving water is of extreme significance to Aboriginal culture for its domestic, traditional and spiritual values, and
 - (b) whilst water supplied for the environment will provide protection for native flora and fauna, water for fishing, food gathering and recreational activities, it is important that the community respects the spiritual significance of water to the Aboriginal people.

11 Objectives

The objectives of this Plan are to:

- (a) protect natural water levels in pools during periods of no flows,
- (b) protect natural low flows,
- (c) protect or restore a proportion of moderate flows (freshes) and high flows,
- (d) maintain or restore the natural inundation patterns and distribution of floodwaters supporting natural wetland and floodplain ecosystems,
- (e) maintain or imitate natural flow variability,
- (f) maintain groundwater within natural levels and variability critical to surface flows and ecosystems,
- (g) minimise the impacts of in-river structures,
- (h) ensure river flow management provides for contingencies,
- (i) maintain or improve the ecological condition of this water source and its riparian areas over the longer term,
- (j) recognise and protect the contribution from this water source to downstream water sources' environmental and basic right requirements,
- (k) maintain water supply priority for basic landholder rights,
- (l) provide an agreed level of water sharing for irrigation and other industry,
- (m) recognise and protect traditional values of water to Aboriginal people, and
- (n) contribute to the achievement of water quality to support the environmental values of this water source.

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Note. This objective refers to maintaining water quality. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in this Plan make a positive contribution to maintaining water quality.

12 Strategies

The strategies of this Plan are to:

- (a) establish cease (and commence) to pump levels and flow classes,
- (b) limit the amount of water that can be extracted on a daily basis from different flow classes,
- (c) limit the long-term average extraction of water,
- (d) clearly define access rules and conditions for extracting water from this water source,
- (e) establish rules for determining the water available from time to time under access licences,
- (f) establish water allocation accounting rules, and
- (g) specify access licence dealing rules that maximise flexibility for water users without adversely impacting on this water source.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flows,
- (b) change in moderate to high flows,
- (c) change in ecological condition of this water source and dependent ecosystems,
- (d) extent to which basic landholder rights requirements have been met,
- (e) change in economic benefits derived from water extraction and use,
- (f) extent to which native title rights requirements have been met,
- (g) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (h) contribution to the achievement of water quality to support the environmental values of this water source.

Note. Appendix 3 details the objectives to which these performance indicators relate and the methods for assessing these indicators.

Water Sharing Plan for the Wybong Creek Water Source 2003

Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (c) and 21 (e) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore river flow variability in this water source, and also that the level of natural recharge to the groundwater component of this water source will vary.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of groundwater in this water source within the limits of groundwater availability on a long-term average basis,
 - (b) sharing of the flows that occur in this water source on a daily basis, and
 - (c) water extraction to enable the protection of groundwater dependent ecosystems, aquifer integrity and water quality of this water source.

16 Extraction management unit

- (1) The availability of water for extraction from this water source on a long-term average basis will be determined at the level of an extraction management unit.
- (2) The extraction management unit of which this water source is part is known as the Goulburn Extraction Management Unit (hereafter *this Unit*), and is shown on the map in Schedule 5.
- (3) This Unit excludes all groundwater sources unless the groundwater source is established by a Plan made under sections 41 or 50 of the Act to be within this Unit.
- (4) This Unit excludes any river declared by the Minister, and published in the NSW Government Gazette, to be a regulated river.

17 Flow classes

This Plan establishes the following flow classes as the basis for sharing access to water on a daily basis:

- (a) very low flow class at or less than 1 megalitre per day (hereafter *ML/day*) on a rising river, and at or less than 0.5 ML/day on a falling river,

Note. 0.5 ML/day corresponds to the estimated 90th percentile of all days with flow, and is referred to as the cease to pump on a falling river, and 1 ML/day corresponds to the estimated 80th percentile of all days with flow, and is referred to as the commence to pump on a rising river. Special provisions may result in a review of the cease to pump during the life of this Plan.
- (b) B class flows greater than 1 ML/day and at or less than 7 ML/day on a rising river, and greater than 0.5 ML/day and at or less than 7 ML/day on a falling river,
- (c) C class flows greater than 7 ML/day and at or less than 16 ML/day,

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- (d) D class flows greater than 16 ML/day and at or less than 100 ML/day, and
- (e) E class flows greater than 100 ML/day.

Note. This Plan provides for a review of the very low flow class in accordance with clauses 76 and 77.

Note. The flow classes have been determined based on flow information that inherently includes seasonal effects as well as evaporation and seepage losses.

18 Flow reference point

For the purpose of this Plan, all flows referred to relate to the estimated flows at the flow reference point at the downstream end of this water source, as shown on the map in Schedule 2.

19 Determination of flow class

Announcement of flow classes will be made from time to time by the Minister based on the flow at a flow gauging station, correlated to the flow reference point established in clause 18.

Note. At the commencement of this Plan, the Wybong flow gauging station will be used as the tool to assess the end of water source flow. Additional flow gauging stations may be established as part of the implementation of this Plan. All gauging stations will be calibrated to the flow reference point.

20 Recharge of the groundwater component of this water source

For the purposes of section 5 (3) of the Act, the overall basis for water sharing in this Plan includes the average annual recharge to the alluvial aquifers in this water source of 3,820 megalitres per year (hereafter *ML/yr*).

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Part 4 Environmental water provisions

21 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

22 Environmental health water

(1) Environmental health water is identified and established as follows:

(a) in very low flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 100% of the groundwater recharge, minus 1.8 ML/day,

Note. 1.8 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights.

(b) in B class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 50% of the groundwater recharge, minus 8.8 ML/day,

Note. 8.8 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limits and basic landholder rights.

(c) in C class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 30% of the groundwater recharge, minus 15.3 ML/day,

Note. 15.3 ML/day is the amount of water estimated at the commencement of the Plan for C class total daily extraction limits and basic landholder rights.

(d) in D class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 30% of the groundwater recharge, minus 22.8 ML/day,

Note. 22.8 ML/day is the amount of water estimated at the commencement of the Plan for D class total daily extraction limits and basic landholder rights.

(e) in E class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 30% of the groundwater recharge, minus 38.8 ML/day, and

Note. 38.8 ML/day is the amount of water estimated at the commencement of the Plan for E class total daily extraction limits and basic landholder rights.

(f) on a rising river, the daily flow for 24 hours after an upper flow level specified in clause 17 (a) to (c) is exceeded, minus the total daily extraction limit (hereafter **TDEL**) for the flow class that occurred prior to the flow level being exceeded as specified in clause 46 (1), minus the provision for basic landholder rights specified in clauses 27 and 28.

Note. This provision ensures the first flush of a rising river is allowed to pass before increased water extraction can commence.

(2) The environmental health water in subclause (1) may be amended, as specified in clause 76.

(3) Environmental health water is maintained as follows:

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- (a) in very low flows:
- (i) the holders of access licences are not permitted to access any water, and
 - (ii) persons exercising domestic and stock and native title rights may take a combined total of up to 1.8 ML/day,
- Note.** The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.
- (b) in B class, C class, D class and E class flows:
- (i) the holders of access licences have restricted access to water as specified in clause 46,
 - (ii) persons exercising domestic and stock and native title rights may take water, and
 - (iii) if the water taken under domestic and stock and native title rights is assessed to be exceeding 1.8 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 51 to maintain the environmental health water in this flow class,
- (c) in all flow classes, limits are imposed on the availability of water in accordance with clauses 36 and 38, that protect a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction,
- (d) on a rising river, for 24 hours after an upper flow level specified in clause 17 (a) to (c) is exceeded, the holders of access licences may only extract the TDEL for the flow class that occurred prior to the flow level being exceeded as specified in clause 46 (1),
- (e) no more than 7 ML/day can be extracted from the aquifers of this water source, and
- (f) the Minister may:
- (i) within twelve months of gazettal of this Plan, identify pools in the rivers in the water source that require special protection and establish initial pool control levels at key sites,
 - (ii) consult with appropriate Government Departments and water users in the water source in establishing the control levels in subclause (i),
 - (iii) determine that, notwithstanding all other rights and conditions, extraction of water from a designated pool is not permitted below a specified level, and
 - (iv) pursuant to section 42 (2) of the Act, review the initial pool control levels in accordance with clause 76.

Note. These rules protect the water for the environment by limiting both the water extracted over the long term, and the rate of extraction of water in different flow ranges, and by limiting extraction from the alluvial aquifer to a percentage of the annual average recharge, thereby achieving the objectives of this Plan.

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Note. This Plan recognises that the environmental health water provisions provide non-extractive benefits including, traditional Aboriginal spiritual, social, customary and cultural benefits, and contribute to improved water quality.

23 Extraction by water supply work

- (1) Notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only if there is visible flow in the river in the vicinity of the work.
- (2) In addition to subclause (1), all approved water supply works within 40 metres of the rivers specified in Schedule 3, shall comply with pool control levels and key sites established under clause 22 (3).

Note. Provisions in this clause will help achieve the objective specified in clause 11 (a).

24 Supplementary environmental water

At the commencement of this Plan, there is no water committed for specified environmental purposes in accordance with section 8 (1) (b) of the Act.

25 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there is a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

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Part 5 Basic landholder rights

26 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

Note. The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock and native title rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

27 Domestic and stock rights

- (1) At the commencement of this Plan, the water requirements of holders of domestic and stock rights are estimated to be a total of 1.8 ML/day.
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in this water source or as a result of an increase of the exercise of basic landholder rights by existing landholders and/or by the subdivision of properties where water can be extracted from the alluvial aquifer.

28 Native title rights

- (1) At the commencement of this Plan there are no holders of native title rights and therefore the water requirements for native title rights are a total of 0 ML/day.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note. Increase in use of native title rights may occur as a result of granting of native title rights under the Commonwealth's *Native Title Act* 1993.

29 Harvestable rights

The requirement for water under harvestable rights is the amount of water owners of land are entitled to capture pursuant to the harvestable rights Order published in the NSW Government Gazette on 23 March 2001 under section 54 of the Act.

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Part 6 Bulk access regime

30 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climatic variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 9 Division 2 of this Plan,
 - (e) establishes rules according to which access licences are managed as provided for in Part 10 of this Plan, and
 - (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Parts 9 and 10 of this Plan.

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Part 7 Requirements for water under access licences

31 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The amount of water specified in this Part represents the estimated total volumes specified on access licences to extract water from this water source. It is not a commitment to supply that water.

32 Estimate of water requirements

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the requirements identified for water for extraction under access licences within this water source will total approximately:
 - (a) 7,942 ML/yr for unregulated river and domestic and stock access licences, and
 - (b) 267 ML/yr for aquifer access licences.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, there will be several runoff harvesting access licences in this water source, that will have their access licence share component expressed as the water that can be extracted from time to time from the approved works.
- (3) This Plan recognises that the total requirements for water for extraction under access licences within this water source may change during the term of this Plan as a result of:
 - (a) the granting, surrender, cancellation or non-renewal of access licences in this water source, or
 - (b) the volumetric quantification of the share components of other existing access licences that are currently non-volumetric.

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Part 8 Rules for granting access licences

33 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in this water source and the need to protect the ecological health of the river and groundwater dependent ecosystems and groundwater quality.
- (2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than access licences resulting from an application of a type listed in section 82 (1) of the Act.
- (4) Any individual daily extraction limit (hereafter *IDEL*) granted in accordance with this clause cannot exceed the *IDEL* initially assigned to an equivalent share component for that category of access licence, as varied by clause 51.
- (5) In accordance with section 56 of the Act, all access licences in this water source shall have a share component expressed as a volume in ML/yr.
Note. The extraction component of individual access licences will be assigned as individual daily extraction limits in accordance with clause 49.
- (6) Notwithstanding subclause (5), runoff harvesting access licences may have the share component expressed either in terms of a volume in ML/yr or in terms of the amount of water which can be extracted from time to time from specified works.

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Part 9 Limits to the availability of water

Division 1 Long-term average extraction limit

34 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

35 Extraction management unit

Management of the long-term extraction of water from this water source will be undertaken in the context of the extraction management Unit referred to in clause 16 (2).

36 Long-term average extraction limit

- (1) The long-term average extraction limit in this Unit will be the total of:
 - (a) The total requirements for water for extraction under access licences within this water source, as specified in Part 7 of this Plan,
 - (b) The total requirements for water for extraction under access licences within other water sources in this Unit,
 - (c) an estimate of the annual extraction of water under domestic and stock rights, and native title rights in this water source at the commencement of this Plan, and
 - (d) an estimate of the annual extraction of water under domestic and stock rights, and native title rights in this other water sources in this Unit.

37 Variation of the long-term average extraction limit

The long-term average extraction limit of this Unit may be varied by the Minister if access licence dealings result in the granting, surrender, non-renewal or cancellation of access licences in this Unit.

Division 2 Available water determinations

38 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
 - (a) water extraction in this Unit will be monitored in each water accounting year to determine if there is any growth in volumes extracted above the long-term average extraction limit specified in clause 36, based on comparison of the limit against the average extraction within this Unit over that year and the preceding 2 years,

Note. A water accounting year is defined in clause 43 (3).

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- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) from 1 July 2004, the available water determination for domestic and stock access licences should be of such volume of water as is equivalent to the access licence share component, with priority given to making this water available above the making of water available to all other categories of access licence, and such determinations should be made annually,
- (d) for unregulated river and aquifer access licences, an initial available water determination, of such volume of water as is equivalent to two times the access licence share component, should be made on 1 July 2003, and such determination should apply for one water accounting year,
- (e) from 1 July 2004, available water determinations for unregulated river and aquifer access licences, including all subcategories, should be such volume of water as is equivalent to the access licence share component, except as provided in subclauses (f) and (g), and such determinations should be made annually,
- (f) if the 3 year average of extraction in this Unit exceeds the long-term average extraction limit established in clause 36 by 5% or greater, then the available water determination for the following water accounting year for unregulated river and aquifer access licences in this water source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
- (g) when the 3 year average of extraction in this Unit is less than 95% of the long-term average extraction limit established in clause 36, the available water determination for unregulated river and aquifer access licences in this water source shall be increased to such an extent as to allow extraction to increase to that extraction limit,
- (h) notwithstanding subclause (g), the available water determination shall not exceed 100% of total access licence share components,
- (i) a new available water determination for unregulated river and aquifer access licences determined under subclause (f) or (g) should be repeated for each of the subsequent two water accounting years unchanged in quantity, and
- (j) available water determinations for runoff harvesting access licences should be made annually and should be the access licence share component.

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Part 10 Rules for managing access licences

Division 1 General

39 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b) and 21 (a) of the Act, having regard to:

- (a) the environmental water rules established in Part 4 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 5 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 7 of this Plan.

Division 2 Water allocation account management

40 Water allocation account management

This Division is made in accordance with sections 20 (2) (b) and 21 (c) of the Act.

41 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.

Note. Water allocations may be assigned to or from these accounts by a water allocation assignment made under Chapter 3 Part 2 Division 4 of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Note. Water allocations may also be recredited to these accounts in accordance with section 76 of the Act, subject to the operation of a return flows scheme established under section 75 of the Act.

42 Accrual of water allocations

Water allocations will be accrued into water allocation accounts in accordance with the Minister's available water determinations as specified in clause 38.

43 Annual accounting for water extraction

- (1) Water taken from this water source will be accounted for at least annually.
- (2) Water extracted by a water supply work nominated by an access licence is taken to be extracted and will be periodically debited against the access licence's water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) The maximum water allocation that can be carried over from one water accounting year to the next is as follows:
 - (a) 100% of the access licence share component from 2003/4 to 2004/5,
 - (b) 200% of the access licence share component from 2004/5 to 2005/6, and

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- (c) thereafter, the sum of the previous two available water determinations.
- (5) Notwithstanding subclause (4) total water in any water allocation account cannot exceed 3 times the share component of the access licence:
 - (a) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in that year,
 - (b) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (c) minus any water allocations assigned to another licence by a water allocation assignment under section 71 G of the Act in that year.
- (6) In any one water accounting year, subject to any local impact restrictions arising from Part 10 Division 4 of this Plan, water taken from this water source under an access licence may not exceed a volume consisting of:
 - (a) twice the water allocation accrued under the licence that year,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in that year,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71 G of the Act in that year.
- (7) A water allocation account shall remain at or above zero at all times.

44 Three year accounting for water extraction

- (1) Water taken from this water source in any 3 consecutive water accounting years under an access licence may not exceed a volume consisting of:
 - (a) the water allocations accrued under the licence in those years,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71 G of the Act in those years.
- (2) Notwithstanding subclause (1), water taken under an access licence from this water source in the first 3 water accounting years of this Plan may not exceed a volume consisting of:
 - (a) 3 times the share component of the access licence,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71G of the Act in those years.

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Division 3 Sharing flows on a daily basis

45 Sharing flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act.

46 Total daily extraction limits

- (1) This Plan establishes a total daily extraction limit (hereafter **TDEL**) from this water source for each flow class as follows:

- (a) 7 ML/day for B class,

Note. 7 ML/day represents 28% of the top of B class flows for the critical month (December) and 50% of the recharge (expressed on a daily basis).

- (b) 13.5 ML/day for C class; **Note.** 13.5 ML/day represents 40% of the top of C class flows for the critical month (December) and 70% of the recharge (expressed on a daily basis).

- (c) 21 ML/day for D class,

Note. 21 ML/day represents 13% of the 15th percentile flows for the critical month (December) and 70% of the recharge (expressed on a daily basis).

- (d) 37 ML/day for E class, and

Note. 37 ML/day represents 30% of the 15th percentile in the critical month (December) and 70% of the recharge (expressed on a daily basis).

- (e) Notwithstanding subclauses (1)(a) to (1)(d), the maximum daily extraction limit from the alluvial aquifers is initially set at 7 ML/day, except when flows at the flow reference point are 0.5 ML/day or less on a falling river, or 1.0 ML/day on a rising river, when the daily extraction limit is zero, and during B class flows when the daily extraction limit is 5 ML/day.

Note. The TDEL defines the maximum volume of water that can be extracted from this water source on any day when the flow in the Creek is at a particular flow level. The TDEL is also subject to review in accordance with clauses 76 and 77.

- (2) The TDEL for each flow class specified in subclause (1) applies to all rivers and aquifers within this water source apart from those rivers identified as minor streams in a harvestable right Order made under section 54 of the Act.

Note. The harvestable rights Order applying to this area at the commencement of this Plan is that gazetted on 23 March 2001 under section 54 of the Act. It identifies minor streams as non-permanent 1st and 2nd order streams as shown on topographic maps.

47 Initial assignment of the TDEL to categories of access licence

The TDEL for each flow class will initially be assigned to categories of access licences according to the following:

- (a) Domestic and stock access licences:

- (i) 0.2 ML/day of B class,
 (ii) 0.2 ML/day of C class,
 (iii) 0.2 ML/day of D class, and
 (iv) 0.2 ML/day of E class.

- (b) Unregulated river and aquifer access licences:

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- (i) 6.8 ML/day of B class,
- (ii) 13.3 ML/day of C class,
- (iii) 19.8 ML/day of D class, and
- (iv) 36.8 ML/day of E class.

48 Unassigned TDEL

- (1) At the commencement of this Plan, there is no unassigned TDEL.
- (2) If an access licence is surrendered, cancelled or not renewed the TDEL for unregulated river and aquifer access licences in clauses 46 and 47 shall be diminished accordingly.

Note. While the outcome of the review at clauses 76 and 77 may result in an increase in the TDEL, this will not result in additional unassigned TDEL.

49 Daily extraction limits for individual access licence holders

- (1) Each access licence requiring an individual daily extraction limit (hereafter *IDEL*), as specified in Part 12 of this Plan, will be assigned the same proportion of the TDEL specified in clause 47 as its share component bears to all the share components of licences of that category.
- (2) Assignment of IDELs to access licences will occur after the review of TDELs as specified in clauses 76 and 77.
- (3) Notwithstanding subclause (1), in relation to those access licences that are currently excluded from a flow class or part of a flow class by existing conditions on the access licence or the water supply work nominated by the access licence, the IDEL resulting from subclause (1) will be adjusted to reflect as far as possible such an exclusion.

50 Granting of unassigned TDEL

There will be no unassigned TDEL for the duration of this Plan.

51 Adjustment to TDELs and IDELs

- (1) Pursuant to section 42 (2) of the Act, if total extraction of water under domestic and stock or native title rights exceeds the level specified in Part 5 of this Plan:
 - (a) the TDEL for unregulated river and aquifer access licences in clause 47 (b) shall be diminished to allow these additional basic landholder rights to be met, and
 - (b) the IDELs of each unregulated river and aquifer access licence will then be reduced to comply with this diminished TDEL.
- (2) If the review of the very low flows specified in clauses 76 and 77 results in an amended TDEL for any flow class, then the assignment of the TDEL in a flow class to unregulated river and aquifer access licences as specified in clause 47 (b) shall be adjusted so the TDEL for the flow class is not exceeded.

Note. The amendment of the TDEL may result in a change of the volumes assigned to unregulated river and aquifer access licences.

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52 Administrative arrangements for managing access to daily flows

- (1) Notwithstanding the forgoing provisions of this Division, this Plan allows group management of access licences with respect to the IDELs.
- (2) The Minister may determine that, from the commencement of this Plan and until otherwise determined:
 - (a) all access licences with IDELs shall be made part of a group maintained by the Minister, and
 - (b) access licences with IDELs will be assessed as a whole against their combined IDELs.
- (3) At any time when subclause (2) does not apply:
 - (a) access licence holders may make a request to form a group for their access licences,
 - (b) access licence holders may have their licence removed from a group, in which case they shall be permitted to extract under that licence a maximum of the licensed IDEL, and
 - (c) where an access licence is removed or added to a group, the group's combined IDEL shall be adjusted by the amount of the IDEL on the subject access licence.
- (4) Groups will be managed according to the following rules:
 - (a) daily extraction by a group cannot exceed the combined IDELs of all access licences in the group,
 - (b) where it been assessed that a holder of an access licence within a group is repeatedly causing the combined IDEL to be exceeded then the Minister may remove that access licence from the group,
 - (c) where daily extraction by a group exceeds the combined IDELs of all access licences in the group, then the Minister may dissolve the group and require each access licence holder to comply with the licensed IDELs,
 - (d) should a holder of an access licence which is part of a group commit the IDELs of that licence to the environment consistent with section 8 (1) (c) of the Act, then those IDELs shall be removed from the group,
 - (e) an access licence may not be in more than one group, and
 - (f) the Minister may refuse to allow an access licence to be included in a group, and may refuse a request to form a group.

53 Infrastructure failure

- (1) In the event of infrastructure failure, the Minister can elect to:
 - (a) continue to announce the current flow class,
 - (b) announce another flow class based on climatic conditions and any other flow gauging information, or
 - (c) restrict access to water to the lowest flow class.

Note. Infrastructure is defined in the dictionary.

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Note. If satisfied that it is necessary to do so in the public interest, the Minister may direct the holders of an access licence to cease using a water supply work in accordance with section 323 of the Act.

Division 4 Management of local impacts

54 Management of local impacts

- (1) This Division is made in accordance with sections 21 (a) of the Act.
- (2) This Division only applies to aquifer access licences in this water source.

55 Water level management

- (1) The Minister may declare that, in order to protect groundwater levels within the aquifer in this water source, local access rules are to apply in a defined area known as a local impact area.
- (2) If water levels in any part of the aquifer in this water source have declined to such an extent that adverse impact is occurring, or is likely to occur, extraction from all water supply works (bores) within a local impact area declared under subclause (1) from which access is authorised by an aquifer access licence will be restricted to such an extent and for such time as is required to reinstate water levels to such a degree as to mitigate or avoid that impact.

Note. This provision recognises that in some locations, at certain periods of high groundwater demand, critical water level declines may occur, and that additional extraction limitations may be required.

56 Water quality management

- (1) The beneficial uses of the aquifer in this water source are raw water for drinking, and ecosystem protection, based on beneficial use classes identified in the Australian and New Zealand Environment and Conservation Council *Water Quality Guidelines 2000*, and the National Health and Medical Research Council *Raw Water for Drinking Purposes Guidelines 1996*.
- (2) Water quality decline will be deemed unacceptable if extraction is likely to cause water quality to decline to a lower beneficial use class.

Note. It is not recommended that the water from the aquifer in this water source be consumed directly without prior treatment. Land use activities may have polluted the groundwater in some areas.

- (3) The Minister may declare that, in order to protect water quality within the aquifer of this water source, local access rules are to apply in a defined area known as a local impact area.
- (4) If unacceptable water quality declines are resulting from extraction, extraction from all water supply works (bores) within a local impact area declared under subclause (3) from which access is authorised by an aquifer access licence will be restricted to such an extent and for such time as required to halt that decline, or restore the beneficial use of the aquifer in this water source.

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57 Extraction restrictions

The Minister may, in the event of local impact restrictions arising from this Division impose, by Order, a reduction in annual, quarterly, monthly, weekly or daily extraction rates from water supply works (bores) in the affected area.

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Part 11 Access licence dealing rules

58 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (e) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

Note. The Minister's access licence dealing principles are contained in Appendix 4.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. There are a number of mechanisms within the Act, called access licence dealings, to change either the ownership of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised. These dealings are governed by the principles in section 5 of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

59 Rules relating to constraints within this water source

- (1) This clause applies to any relevant dealings under sections 71D, 71F and 71J of the Act, and section 71G of the Act with respect to water allocation assignments within this water source.
- (2) Dealings are prohibited under this clause if:
 - (a) any of the access licences or water allocations involved are not within this water source, unless the dealing is permitted under clause 64,

Note. Clause 61 relates to any dealings that involve an access licence moving from one water source to another.

- (b) prior to initial assignment of IDELs, the dealing would result in the access licence extraction component that had nominated a work in one management zone, nominating a work in another management zone, and the change of location is in an up-river direction,
- (c) after initial assignment of IDELs, the dealing would result in the access licence extraction component that had nominated a work in one management zone, nominating a work in another management zone, and the change of location is in an up-river direction, unless the sum of the IDELs held in the up-river zone remains not more than 10% greater than the sum of the IDELs in the receiving zone when IDELs are initially assigned, or
- (d) the dealing would result in the total extraction under aquifers access licences through nominated works in an area, plus basic landholder rights extraction in that area, causing adverse local impact in accordance with Part 10 Division 4 of this Plan.

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60 Rules for access licence dealings which alter the times, rates or circumstances specified in access licence extraction components

Notwithstanding clause 59, applications under section 71F of the Act to vary the times, rates or circumstances specified in an access licence with respect to the taking of water under the licence are prohibited.

61 Rules for change of water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.

- (2) Dealing under section 71E of the Act are prohibited in this water source, unless provided for in this clause.
- (3) An access licence with a share component specifying this water source may be cancelled and a new licence issued only if the new access licence issued is within this Unit, and the access licence dealing rules in the other water source permit such a dealing.
- (4) An access licence with a share component specifying another water source may be cancelled and a new licence issued in this water source only if:
- (a) the access licence cancelled is within this Unit,
 - (b) the access licence dealing rules in the other water source permit such a dealing, and
 - (c) IDELs in this water source have been assigned to access licences.

Note. Allowing access licence share component dealings before the assignment of IDELs would distort the initial distribution of the TDELs as IDELs.

- (5) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.
- (6) The extraction component of the cancelled access licence is not to be carried over to the new access licence.

62 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category may be permitted only if:
- (a) the conversion is from an unregulated river or aquifer access licence to a runoff harvesting access licence,
 - (b) the conversion is from unregulated river access licence to an aquifer access licence,
 - (c) the conversion is from stock and domestic access licence to unregulated river access licence, or

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- (d) the conversion is from unregulated river access licence to stock and domestic access licence.
- (3) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

63 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of this water source are prohibited.

64 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71G of the Act, in relation to water allocation assignments between water sources.
- (2) Dealing under section 71G of the Act that result in water allocation assignments to or from access licences in this water source are prohibited unless provided for in this clause.
- (3) Dealings that assign water allocations between access licences inside this water source and access licences outside this water source, but inside this Unit, are permitted only if the access licence dealing rules in the other water source permit such a dealing.
- (4) Dealings that assign water allocations between access licences inside this water source are permitted, subject to clause 59.

Note. Each water allocation assignment must be applied for. Licence holders may enter into private contracts to assign water allocations for a number of years. Such contracts are not guaranteed by the Government, and approval must be sought annually. Approval will be subject to the rules in this Plan, including local impact assessment.

65 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Dealings that result in interstate assignment of water allocations to or from this water source are prohibited.

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Part 12 Mandatory conditions

66 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (c) of the Act.
- (2) All access licences shall have mandatory conditions to give effect to the following:
 - (a) the specification of share component of the access licence,
 - (b) the specification of extraction component of the access licence, including IDELs arising from the operation of Part 10 Division 2 of this Plan, where applicable, and the variation thereof,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to the water allocation account management rules established in Part 10 Division 1 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account,
 - (f) the requirement that water may only be taken under the access licence by the water supply work nominated by the access licence,
 - (g) the requirement that water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group, or if the access licence is a runoff harvesting access licence,
 - (h) the requirement that an unregulated river access licence or a runoff harvesting access licence does not authorise its holder to take water from the aquifers of this water source, and
 - (i) any other conditions required to implement the provisions of this Plan.

67 Aquifer access licences

All aquifer access licences shall have an additional mandatory conditions to give effect to the following:

- (a) the requirement that all extraction under aquifer access licences will be subject to the local impact management conditions established in Part 10 Division 4 of this Plan, and
- (b) the requirement that an aquifer access licence only authorises its holder to take water from the aquifers of this water source.

68 Domestic and stock access licences

All domestic and stock access licences shall have an additional mandatory condition to give effect to the following:

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- (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act.

69 Runoff harvesting access licences

All runoff harvesting access licences shall have an additional mandatory condition imposed on them specifying that water may be taken without restriction in rate, but only from the specified work.

70 Mandatory conditions on water supply works approvals

Approvals for water supply works for this water source shall have mandatory conditions to give effect to the following:

- (a) extraction measurement devices:
 - (i) shall be installed and maintained on all works used for extraction of water under an access licence, and
 - (ii) shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
- (b) water extraction and property water management infrastructure details shall be provided to the Minister on request,
- (c) it is the responsibility of the work approval holder to ascertain from the Minister the flow class at any time before commencing to take water under an access licence with an IDEL,
- (d) notwithstanding all other rights and conditions,
- (e) extraction of water from a river by an approved water supply work shall be permitted only when extraction is consistent with the provisions in clause 23, and, where necessary, the Minister will determine the location and method by which this shall be assessed to suit local circumstances,
- (f) approvals for works used for taking water under an access licence include a condition that extraction under an access licence through the approved work is only authorised with respect to the access licences specified in the condition, and such access licences must be held or leased by the holder of the works approval,
- (g) approvals for dams constructed or used for the storing of water include a requirements for the effective sealing of a dam base against leakage and shall include the requirements to supply:
 - (i) details of the work as set out in the appropriate form, and
 - (ii) a plan showing accurately the location of the work,
- (h) if the water supply works are abandoned at any time, the approval holder must notify the Minister and ensure the works are appropriately removed and, in the case of water bores ensure the aquifer is abandoned to the specifications of the Minister,
- (i) a water bore is only to be constructed by a driller licensed under section 349 of the Act,

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- (j) a water bore must comply with drilling standards as specified by the Minister,
- (k) construction of a water bore must prevent contamination between aquifers through proper bore construction,
- (l) a water bore approval holder must ensure decommissioning procedures comply with applicable standards as specified by the Minister,
- (m) new or replacement water bore to access water for basic rights will be required, as a condition of approval, to be constructed to sufficient depth to maintain access to the water source for the life of the work,
- (n) the water bore approval holder is, within 2 months of completion, or after the issue of the approval if the water bore is existing, to furnish to the Minister with:
 - (i) details of the work on the prescribed form,
 - (ii) a plan showing accurately the location of the work in relation to portion and property boundaries, and
 - (iii) details of any water analysis and/or pumping tests required by the Minister,
- (o) if during the construction of the water bore, saline or contaminated water is encountered above the producing aquifer, such water is to be sealed off by:
 - (i) inserting the appropriate length(s) of casing to a depth sufficient to exclude the saline or contaminated water from the work, and
 - (ii) placing an impermeable seal between the casing(s) and the walls of the bore hole from the bottom of the casing to ground level, as specified by the Minister,
- (p) if a water bore is abandoned, the water bore approval holder is to:
 - (i) notify the Minister that the work has been abandoned, and
 - (ii) seal off the aquifer by backfilling the work to ground level after withdrawing the casing (lining), as specified by the Minister,
- (q) a water bore must comply with the relevant local impact management rules in Part 10 Division 4 of this Plan,
- (r) notwithstanding the available water determination, it is the responsibility of the water bore approval holder to ascertain from the Minister whether or not there are in place any local impact restrictions before commencing to take water from this water source, and
- (s) a water bore approval holder must supply to the Minister on request, and to the required standards, a report pertaining to the quality of the water obtained from the water bore.

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Part 13 Granting and amending water supply works approvals

71 Granting and amending water supply works approvals

This Part is made in accordance with section 21 (b) of the Act.

72 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence specifying the runoff harvesting dam as the nominated work.
- (2) When water allocations that may be taken from a runoff harvesting dam are reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 11 of this Plan, the Minister may impose an additional condition requiring the dam to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the dam to be reduced, consistent with the reduction in water allocations available.

Note. Extraction of water from a runoff harvesting dam requires a runoff harvesting access licence, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required. Runoff harvesting is a category of access licence to be established by regulation under section 57 (k) of the Act.

73 In-river dams

No new in-river dams shall be approved within this water source.

Note. Taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act.

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Part 14 Monitoring and reporting

74 Monitoring and reporting of performance indicators

The monitoring and reporting of the performance indicators specified in clause 13 shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with a water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 52 (5) of the Act, the implementation program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program will be included in the annual report for the Department.

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Part 15 Amendment of this Plan

75 Amendment of this Plan

This Part is made in accordance with section 42 (2) of the Act.

76 Amendment of flow levels, pool protection provisions and TDELS

- (1) The Minister may, under section 42(2) of the Act and by notice published in the NSW Government Gazette:
 - (a) vary the very low flow levels, and the bottom of B class flows established in clause 17, following field verification,
 - (b) vary the initial pool control levels and key sites established in clause 22 (3),
 - (c) vary the TDEL for any flow class as specified in clause 46, following a study of water usage and a study of the connectivity of surface water and groundwater, and/or
 - (d) vary the environmental health water specified in clause 22 as a result of any variation to a TDEL arising from subclause (1) (c).
- (2) Any variation made under subclause (1) (a) should not result in the very low flow class being greater than 1 ML/day or less than 0.5 ML/day on a falling river.
- (3) Any variation made under subclause (1) (c) should be limited to:
 - (a) for B class, no more than 60% of the surface flow assessed in subclause (8) at the 50th percentile flow of all days at the flow reference point, but not less than 4 ML/day,
 - (b) for C class, no more than 60% of the surface flow assessed in subclause (8) at the 30th percentile flow (of all days) at the flow reference point, but not less than 11.5 ML/day,
 - (c) for D class a maximum of 6.5 ML/day above the TDEL for C class, but not less than 20 ML/day, and
 - (d) for E class a maximum of 50 ML/day, but not less than 37 ML/day.
- (4) The Minister should undertake the field verification in subclause (1) (a) as soon as practical, but before the review of this Plan under section 43 (2) of the Act.
- (5) The Minister should review the pool control levels and key sites in subclause (1) (b) in conjunction with the field verification in subclause (4).
- (6) The Minister should cause the studies established in subclause (1) (c) to be undertaken after at least 3 years of measurement of use, but before the review of this Plan under section 43 (2) of the Act.
- (7) The field verification established in subclauses (1) (a) and the pool control level review in subclause (1) (b) should assess:
 - (a) whether the flow level meets the objectives at clause 11 (a) and (b) of this Plan, and
 - (b) whether the pool control levels and key sites meet the objectives specified in clauses 11 (a) and (i), and specifically consider the following:

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- (i) the suitability of the location of the key sites used in assessing pool health upstream of the site,
 - (ii) the drawdown of the water levels within the pools upstream of the key sites during periods of extraction, and
 - (iii) the significance of pools that are impacted by drawdown.
- (8) The studies established in subclause (1) (c) shall:
 - (a) assess whether existing and proposed TDELs meet the objectives specified in clause 11 (e) and (f), and
 - (b) specifically determine the assessed surface flow at the flow reference point by developing the relationship between the flow reference point flow and daily extracted volumes, including consideration of the following matters:
 - (i) summation of surface flow and extraction on any day,
 - (ii) development of a theoretical flow duration curve for the period of the study based on the summation of surface flow and extraction,
 - (iii) calibration of the theoretical flow duration curve using historical rainfall data and by using a control site in another water source,
 - (iv) reassessment of the river and groundwater connectivity and specifically, review of the groundwater sustainable yield,
 - (v) the relationship of river flow at various sites within this water source for different flow classes, determined by information from any or all river flow gauging stations, and
 - (vi) the water level behaviour of groundwater monitoring bores.
- (9) In undertaking the field verification and studies of water usage and connectivity of surface water and groundwater in this clause, the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the field results and conclusions in terms of the degree to which the objectives in subclauses (7) and (8) are met,
 - (iv) the flow levels, pool control levels and key sites and TDELs recommended to meet the objectives, and
 - (v) the socio-economic impacts of recommended changes to the flow levels, pool control levels and key sites, and changes to TDELs.

77 Review of field verification and TDELs

- (1) The Minister should seek advice from a review body on the report specified in clause 77 (9) (b), before varying this Plan in accordance with clause 77 (1), if the report recommends a variation in the flow levels in clause 17, the establishment or

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variation of pool control levels and key sites, and a variation of TDELS in clause 46.

- (2) This review body may be:
 - (a) a water management committee with water sharing responsibilities for this water source if one exists,
 - (b) an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a water management committee referenced at subclause (a), or
 - (c) if there is no water management committee with water sharing responsibilities for this water source, then by a catchment management board with responsibilities for this water source or an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a catchment management board.
- (3) The review body should provide advice to the Minister on the report specified in clause 77 (9) (b), and advise on any changes to the recommendations contained in the report in relation to any variations of the flow levels, any establishment or variation of pool control levels and key sites and any variations of TDELS.
- (4) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date at the latest.

78 Other amendment of this Plan

This Plan can also be amended in accordance with clause 51 of this Plan in respect to adjustments to TDELS and IDELS.

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

account water is the balance in a licence water allocation account at a particular time.

Note. A licence water allocation account records water allocations accrued under the licence as well as water allocations taken, assigned or re-credited. The operation of the account is also governed by rules for the carrying over of credits from one accounting period to the next and rules for the maximum credit that may be allowed to accumulate in the account as established in a water sharing plan. Water allocations are the shares of available water accrued under an access licence from time to time as a result of available water determinations.

abandoned refers to a water bore that is no longer being used.

conversion factor refers to the adjustment factor that is to be applied to an access licence share component when it is cancelled in one water source, and reissued in a different water source and visa versa, or when the access licence is converted from one category to another. It is designed to provide for the fact that the value of a unit of share component in terms of the average water allocations that result from it may vary from one water source to another, or from one category to another.

endangered ecological communities means ecological communities listed in Schedule 1 of the *Threatened Species Conservation Act 1995* or Schedule 4 of the *Fisheries Management Act 1994*.

extraction limit is a limit on the amount of water that may be extracted from an extraction management unit.

extraction management unit is a group of water sources for the purpose of managing long-term annual average extraction.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs. See also **in-river dam** and **runoff harvesting dam**.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) very low flows may be a class on their own,
- (b) low flows may be categorised as 'A' class,
- (c) moderate flows may be categorised as 'B' class,
- (d) high flows may be categorised as 'C' class,
- (e) very high flows may be categorised as 'D' class, and
- (f) extremely high flows may be categorised as 'E' class.

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

groundwater is water that occurs beneath the ground surface in the saturated zone.

groundwater dependent ecosystems are ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater.

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individual daily extraction limit (IDEL) is the volume of water that may be extracted by an individual access licence on a daily basis from a particular flow class.

infrastructure includes, but is not limited to, a:

- (a) flow gauging device or any other appliance that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated,
- (b) flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within this water source, or
- (c) monitoring bore.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher order rivers are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a “river” gazetted 23rd March 2001. See also ***farm dam*** and ***runoff harvesting dam***.

management zone is an area within the water source to which total daily extraction limits are defined. Management zones are designated only where the water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area.

monitoring bore refers to a bore constructed for the purpose of measuring water levels and/or taking samples for water quality analysis.

recharge is the addition of water, usually by infiltration, to an aquifer.

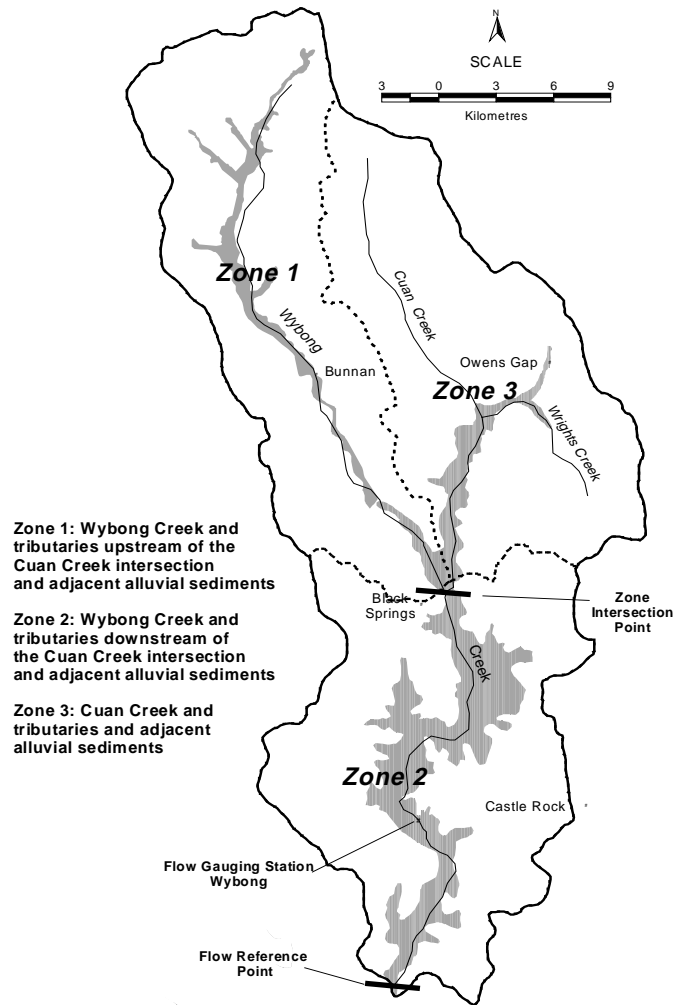
runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a river gazetted 23rd March 2001. See also ***farm dam*** and ***in-river dam***.

Note. This order refers to watercourses shown as blue lines on topographic maps. The lines which are uppermost in a catchment are 1st order streams, when two 1st order streams are joined they make a 2nd order stream, etc. For more information see the Farm Dams Assessment Guide available from the Department of Land and Water Conservation.

total daily extraction limit (TDEL) is the total volume of water that may be extracted under access licences on a daily basis from a particular flow class.

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Schedule 2 Wybong Creek Water Source



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Schedule 3 Rivers in the Wybong Creek Water Source

Rivers in this water source include, but are not limited to:

Wybong Creek

Cuan Creek

Wrights Creek

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Schedule 4 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL – contributes to the target in full

HIGH - while not fully contributing to the target, there is a good level of contribution

PARTIAL - goes some way to contributing to the target

LOW - only small degree of contribution to the target

Relevant target	Level of contribution	Comments
Target 1c Long term average annual extraction limits which are ecologically sustainable, and which minimise downstream impacts, established in all coastal water sources	PARTIAL	<ul style="list-style-type: none"> This Plan clearly sets out the basis for the extraction limit for the Goulburn Extraction Management Unit. Until the cumulative impact of this limit can be assessed for the Goulburn Extraction Management Unit it is not possible to properly assess ecological sustainability and downstream impacts. However application of TDEs should ensure adequate downstream flows.
Target 1e The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency	HIGH	<ul style="list-style-type: none"> This Plan establishes a maximum extraction of groundwater of 70% of average annual recharge.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon	FULL	<ul style="list-style-type: none"> Rules set out in Part 9 of this Plan.

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<p>Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes</p>	PARTIAL	<ul style="list-style-type: none"> • This Plan has daily extraction limits to protect/restore environmental flows. • This Plan has improved low to very low flow protection by establishing a cease to pump and daily extraction limits for C and D class flows. • It is not clear if the level of environmental protection provided by this Plan will be adequate to protect/improve environmental conditions as this depends on the appropriateness of the hypothesis on groundwater connectivity. • This Plan allows for a review at year 5 of this Plan of the flow levels, pool protection measures and daily extraction limits following various hydrological and water use studies. • There is a Healthy River Commission final report pending.
<p>Target 4a Wherever the frequency of “end of system” daily flows would be less than 60 percent of the pre-development level without environmental water rules or extraction limits, the flows increased to 60 percent of pre-development levels or increased by at least 10 percent of the pre-development frequency</p>	PARTIAL	<ul style="list-style-type: none"> • The interaction of the highly connected groundwater with the river and the impact of groundwater extraction below or adjacent to the creek is to be reviewed at year 5 of this Plan. • In C and D classes this Plan rules appears to be an improvement on the current management system. • This Plan also protects the first 24 hours of a flow event by delaying access to the higher class of flows by water users. • This Plan provides for a review of the cease to pump level, the thresholds of all the flow classes and the daily extraction limits at year 5.
<p>Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile</p>	PARTIAL	<ul style="list-style-type: none"> • This Plan has a cease to pump level of 0.5 ML/day and a commence to pump level of 1 ML/day. The 1 ML/day is equivalent to the 95th percentile of all days with flow. • The interaction of the highly connected groundwater with the river is to be reviewed at year 5 of this Plan. • This Plan provides for field verification of flows and review of the cease to pump levels during the term of this Plan.

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Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components	PARTIAL	<ul style="list-style-type: none"> This Plan establishes both share and extraction components for distribution to individual licence holders. This Plan enables the trading of share components and IDELs between access licences.
Target 6b For surface water sources, a pathway for reducing the share components to 200 percent of the long term average annual extraction limit to be established not later than the end of the term of the SWMOP	FULL	<ul style="list-style-type: none"> Total share components for the Goulburn Extraction Management Unit should not exceed 200% of the extraction limits for this Unit. Groundwater share components do not exceed 125% of the sustainable yield.
Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy	PARTIAL	<ul style="list-style-type: none"> The Government has established alternative mechanisms to address this targets. This Plan does provide reasonable market opportunities.
Target 8 Daily extraction components specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80 percent of stressed unregulated rivers	FULL	<ul style="list-style-type: none"> This Plan establishes daily extraction limits across the whole water source.
Target 10 Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved	PARTIAL	<ul style="list-style-type: none"> This Plan recognises the connectivity between surface and groundwater. This Plan is to review the connectivity at year 5 and changes to be made to the flow sharing rules set up by this Plan if required.
Target 11 Groundwater dependent ecosystems identified and mapped for all priority aquifers, and the ecological water requirements assessed to enable local groundwater extraction rates and/or Sustainable Yields to be reviewed	PARTIAL	<ul style="list-style-type: none"> Groundwater dependency of the river environment has been recognised. Review mechanisms established by this Plan.
Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use	LOW	<ul style="list-style-type: none"> The cease to pump level of 0.5 ML/day is less than the assessed requirements for basic landholder rights of 1.8 ML/day. Groundwater pumping below cease to pump levels may compromise basic landholder rights access in dry periods.
Target 13 The knowledge	PARTIAL	<ul style="list-style-type: none"> Two Aboriginal community

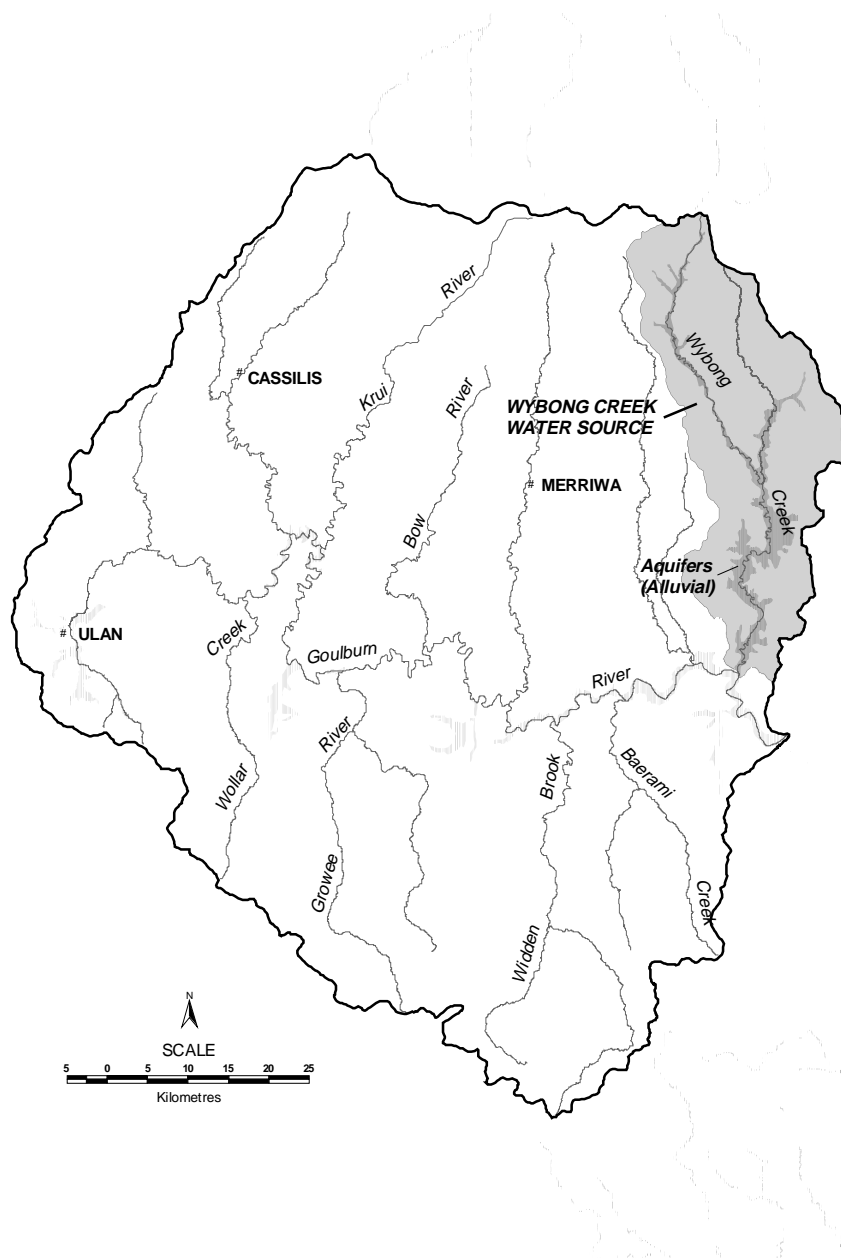
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sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed		<p>representatives have been represented on the water management committee.</p> <ul style="list-style-type: none"> • A workshop was held with members of the LALC to input ideas into development of this Plan.
Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them	PARTIAL	<ul style="list-style-type: none"> • This Plan does not address specific Aboriginal cultural or traditional requirements but has identified dependent ecosystems of particular importance. • An Aboriginal respect statement was developed by local traditional landowners was adopted in the development of this Plan. • This Plan does provide a level of environmental protection which should assist in protecting Aboriginal values.
Target 16a All share components of access licences tradeable	FULL	<ul style="list-style-type: none"> • Part 11 of this Plan sets out the rules for access licence dealings.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water	FULL	<ul style="list-style-type: none"> • This Plan provides for the Minister to establish conversion factors.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	FULL	<ul style="list-style-type: none"> • This Plan establishes management zones for the trading of IDELs. • This Plan establishes rules for trading and dealings within and between zones and to nearby ground water aquifers.
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries	HIGH	<ul style="list-style-type: none"> • This Plan includes a generalised water quality objective. • Committee has acknowledged water quality in Wybong Creek, particularly increasing salinity, turbidity, algae, etc as of concern and recognises salinity by proposing mandatory conditions for dams as well as protecting the first flush (24 hour rule). • This Plan does provide a reasonable level of environmental protection which would assist in protecting water quality. • This Plan provides for water quality management rules in Part 10 Division 4 in relation to groundwater.

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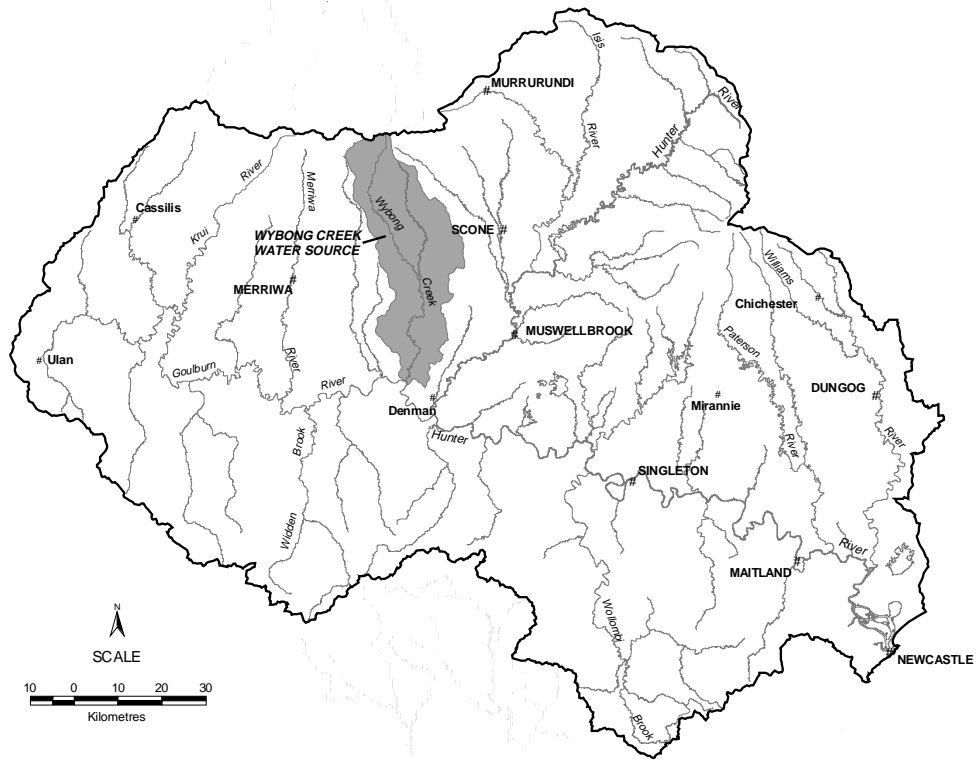
Schedule 5 Goulburn Extraction Management Unit

This Unit excludes any river declared by the Minister, and published in the NSW Government Gazette, to be a regulated river, and all groundwater sources unless the groundwater source is established by a Plan made under sections 41 or 50 of the Act to be within this Unit.



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Appendix 1 Hunter Water Management Area



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Appendix 2 Location of maps

The maps in relation to this Plan may be inspected at:

District Office
Department of Land and Water Conservation
2/160 Bridge Street
MUSWELLBROOK NSW 2333

Regional Office
Department of Land and Water Conservation
464 King Street
NEWCASTLE NSW 2300

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Appendix 3 Performance indicators

Performance indicators for the Wybong Creek Water Source Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
(a) Change in low flows.	11 (a) 11 (b) 11 (c) 11 (f) 11 (g) 11 (i) 11 (j)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> River Flow Objectives (RFOs) 1, 2 and 6. RFO's are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every objective is relevant to every river in NSW. Plan will contribute to a decrease in the frequency and duration of low flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(b) Change in moderate to high flows.	11 (c) 11 (d) 11 (e) 11 (i) 11 (j)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> RFO 3. Plan will maintain or increase the frequency and duration of moderate to high flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(c) Change in ecological condition of this water source and dependent ecosystems.	11 (a) 11 (b) 11 (e) 11 (f) 11 (g) 11 (h) 11 (i) 11 (j) 11 (l)	<ul style="list-style-type: none"> Periodic assessment of identified indicators for ecological condition. 	<ul style="list-style-type: none"> Water sharing plans are limited to providing for changes in flow regime aimed at improving the conditions for the ecological condition of the river. There are many other factors that contribute to ecological objectives. The focus of this performance indicator will be the effect of flow strategies. Therefore assessment of ecological condition should be based largely on hydrologic parameters (such as wetted area, depth in pools and velocity). This attempts to exclude external, non - water sharing plan related factors (such as climate

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Performance indicators for the Wybong Creek Water Source Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
			and catchment landuse changes).
(e) Extent to which basic landholder rights requirements have been met.	11 (j) 11 (k)	Assessment of cease to pump levels in relation to basic rights requirements.	<ul style="list-style-type: none"> Basic landholder rights usage figures in water sharing plans are estimated (not actual use).
(f) Change in economic benefits derived from water extraction and use.	11 (k) 11 (l) 11 (m)	<ul style="list-style-type: none"> Number of days access provided. Percentage change in number and volume of farm dams. Change in unit price of water transferred. 	<ul style="list-style-type: none"> There are many factors affecting economic status of a region, for example commodity prices. Measurement of the number of farm dams will attempt to identify the impact of the plan provisions. Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact if the plan provisions.
(g) Extent to which native title rights requirements have been met.	11 (l)	<ul style="list-style-type: none"> Assessment of cease to pump levels in relation to basic rights requirements. 	<ul style="list-style-type: none"> The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
(h) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	11 (l)	<ul style="list-style-type: none"> Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
(i) Contribution to the achievement of water quality to support the environmental values of this water source.	11 (n)	<ul style="list-style-type: none"> Change in the baseline figures of identified water quality variables. 	<ul style="list-style-type: none"> Many factors may affect water quality that are not related directly to flow management.

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Appendix 4 Minister's access licence dealing principles

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

groundwater source means a water source specified in a groundwater management plan.

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hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or
 - (b) the total volume of water allocations in water allocation accounts, or
 - (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.

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- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
 - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or

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- (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
- (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence,

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subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.

- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

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13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.

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- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:
- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
- (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:

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- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
 - (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
 - (7) Conversion factors rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
 - (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
 - (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
 - (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.

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- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
- (a) if either of the access licences is suspended under section 78 of the Act, or
 - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
- (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and

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- (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or

Water Sharing Plan for the Wybong Creek Water Source 2003

- (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
- (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or

Water Sharing Plan for the Wybong Creek Water Source 2003

- (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

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Water Conservation — *continued*

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

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Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* as amended (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2003 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Central West Water Management Area known as the Castlereagh River above Binnaway Water Source (hereafter **this water source**) as shown on the map in Schedule 2, excluding any river that is declared by the Minister, by Order published in the NSW Government Gazette, to be a regulated river.

Note. The Central West Water Management Area is shown on a map in Appendix 1.

Note. Maps referred to in this Plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2.

- (2) This water source is divided into the following management zones shown on the map in Schedule 2:
 - (a) the main trunk of Castlereagh River – Timor Dam to Pound Yard Weir management zone (hereafter **Zone 1**),
 - (b) the main trunk of Castlereagh River – Pound Yard Weir to Merryula Road Crossing management zone (hereafter **Zone 2**),
 - (c) the main trunk of Castlereagh River – Merryula Road Crossing to Belar Creek confluence management zone (hereafter **Zone 3**),
 - (d) the main trunk of Castlereagh River – Belar Creek confluence to New Mollyann Road management zone (hereafter **Zone 4**),
 - (e) the main trunk of Belar Creek (hereafter **Zone 5**), and
 - (f) all other independent tributaries in this water source (hereafter **Zone 6**).

Note. Zone 6 is deemed to include all rivers in this water source apart from the main trunk of the Castlereagh River and Belar Creek respectively.

Note. Daily extraction limits are defined for each management zone.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Note. Specific conditions apply to access licence dealings within these management zones.

5 Waters to which this Plan applies

- (1) The waters of this water source include all water occurring on the land surface shown on the map in Schedule 2 including but not limited to:
 - (a) all rivers in this water source including, but not limited to, those nominated in Schedule 3, and
 - (b) all lakes and wetlands in this water source.
- (2) The waters of this water source exclude all water contained within aquifers underlying this water source.
- (3) The waters of this water source exclude waters in any river that is declared by the Minister, by Order published in the NSW Government Gazette, to be a regulated river.

6 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.
- (2) Additional terms to those identified in subclause (1) are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible, the rules embodied in this Plan will apply to matters administered under the *Water Act 1912* in the interim.

8 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act, this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 4 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

10 Vision

The vision for this Plan is to protect and enhance water dependent ecological processes for a sustainable environment for the social and economic benefit of current and future communities.

11 Objectives

The objectives of this Plan are to:

- (a) protect natural water levels in pools of creeks, rivers and wetlands during periods of no flow,
- (b) protect natural low flow,
- (c) protect or restore a proportion of moderate flows (freshes) and high flows,
- (d) maintain natural flow variability,
- (e) minimise the effects of weirs and other structures,
- (f) protect aquatic ecosystems,
- (g) protect access to water for basic rights,
- (h) give priority of access to local water utility, domestic and stock access licences over other access licences,
- (i) engender community ownership and acceptance of this Plan,
- (j) provide equitable access to water in accordance with the Act,
- (k) allow for trading of water access rights within this water source,
- (l) sustain viable water based industries, including the irrigation industry,
- (m) encourage water extraction to move from lower flows to higher flows,
- (n) encourage efficient water use practices,
- (o) preserve Aboriginal cultural heritage values across this water source that relate to water sharing management,
- (p) preserve water related European cultural heritage values, and
- (q) contribute to the achievement of water quality to support the environmental values of this water source.

Note. This objective refers to maintaining water quality. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in this Plan make a positive contribution to maintaining water quality.

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12 Strategies

The strategies of this Plan are to:

- (a) establish cease (and commence) to pump levels and flow classes,
- (b) limit the amount of water that can be extracted on a daily basis from different flow classes,
- (c) limit the long-term average extraction of water,
- (d) clearly define access rules and conditions for extracting water from this water source,
- (e) establish rules for determining the water available from time to time under access licences,
- (f) establish water allocation accounting rules, and
- (g) specify access licence dealing rules that maximise flexibility for water users without adversely impacting on this water source.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flows,
- (b) change in moderate to high flows,
- (c) change in local water utilities access,
- (d) change in ecological condition of this water source and dependent ecosystems,
- (e) extent to which basic landholder rights requirements have been met,
- (f) change in economic benefits derived from water extraction and use,
- (g) extent to which native title rights requirements have been met,
- (h) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (i) contribution to the achievement of water quality to support the environmental values of this water source.

Note. Appendix 3 details the objectives to which these performance indicators relate and the methods for assessing these indicators.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (c) and 21 (e) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore river flow variability in this water source.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of water in this water source within the limits of water availability on a long-term average basis, and
 - (b) sharing of the flows that occur in this water source on a daily basis.

16 Extraction management unit

- (1) The availability of water for extraction from this water source on a long-term average basis will be determined at the level of an extraction management unit.
- (2) The extraction management unit of which this water source is part is known as the Castlereagh Valley Extraction Management Unit, and is shown on the map in Schedule 5.

17 Flow classes

This Plan establishes the following flow classes as the basis for sharing of daily flows:

- (a) For Zone 1:
 - (i) very low flow class at or less than 3.3 megalitres per day (hereafter *ML/day*),

Note. 3.3 ML/day is referred to as the cease to pump on a falling river and the commence to pump on a rising river. It corresponds to the estimated 56th percentile of all days flow.
 - (ii) A class flows greater than 3.3 ML/day and at or less than 17.6 ML/day, and
 - (iii) B class flows greater than 17.6 ML/day.
- (b) For Zone 2:
 - (i) very low flow class at or less than 3.1 ML/day,

Note. 3.1 ML/day is referred to as the cease to pump on a falling river and the commence to pump on a rising river. It corresponds to the estimated 58th percentile of all days flow.
 - (ii) A class flows greater than 3.1 ML/day and at or less than 20.4 ML/day, and
 - (iii) B class flows greater than 20.4 ML/day.

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- (c) For Zone 3:
- (i) very low flow class at or less than 2.4 ML/day,
Note. 2.4 ML/day is referred to as the cease to pump on a falling river and the commence to pump on a rising river.
 - (ii) A class flows greater than 2.4 ML/day and at or less than 8.2 ML/day, and
 - (iii) B class flows greater than 8.2 ML/day.
- (d) For Zone 4:
- (i) very low flow class at or less than 3.3 ML/day,
Note. 3.3 ML/day is referred to as the cease to pump on a falling river and the commence to pump on a rising river. It corresponds to the estimated 80th percentile of all days flow.
 - (ii) A class flows greater than 3.3 ML/day and at or less than 17.8 ML/day, and
 - (iii) B class flows greater than 17.8 ML/day.
- (e) For Zone 5:
- (i) very low flow class at or less than 1.6 ML/day,
Note. 1.6 ML/day is referred to as the cease to pump on a falling river and the commence to pump on a rising river. It corresponds to the estimated 94th percentile of all days flow.
 - (ii) A class flows greater than 1.6 ML/day and at or less than 9.9 ML/day, and
 - (iii) B class flows greater than 9.9 ML/day.
- (f) This Plan does not establish flow classes for Zone 6.

Note. All water supply works located in Zone 6 are subject to the condition stated in clauses 22 and 68 (d) which only allows water to be extracted where there is a visible flow in the river in the downstream vicinity of the water supply work.

Note. The flow classes have been determined based on flow information that inherently includes seasonal effects as well as evaporation and seepage losses.

Note. This Plan allows for a C class to be established in Zones 1 to 5 during its term under the provisions of clause 75.

18 Flow reference point

For the purpose of this Plan, all flows referred to relate to the estimated flow at the flow reference points of each management zone, as shown on the map in Schedule 2.

Note. There is no flow reference point established for Zone 6 as shown on the map in Schedule 2, as this Plan does not establish flow classes or total daily extraction limits for this Zone.

19 Determination of flow class

Announcement of daily flow classes will be made from time to time by the Minister based on the flow at flow gauging devices, correlated to the flow reference points established in clause 18.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 4 Environmental water provisions

20 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

21 Environmental health water

(1) Environmental health water is identified and established as follows:

(a) In Zone 1:

(i) in very low flows, the flow occurring in this zone minus 0.12 ML/day,

Note. 0.12 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 1.

(ii) in A class flows, the flow occurring in this zone minus 9.52 ML/day, and

Note. 9.52 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 1.

(iii) in B class flows, the flow occurring in this zone minus 14.12 ML/day.

Note. 14.12 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 1.

(b) In Zone 2:

(i) in very low flows, the flow occurring in this zone minus 0.72 ML/day,

Note. 0.72 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 2.

(ii) in A class flows, the flow occurring in this zone minus 12.02 ML/day, and

Note. 12.02 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 2.

(iii) in B class flows, the flow occurring in this zone minus 17.92 ML/day.

Note. 17.92 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 2.

(c) In Zone 3:

(i) in very low flows, the flow occurring in this zone minus 0.19 ML/day and minus 0.2 ML/day when very low flow access is provided under clause 62,

Note. 0.19 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 3 and the 0.2 ML/day is the daily extraction limit available to access licences if established in accordance with the review in clause 62.

(ii) in A class flows, the flow occurring in this zone minus 4.39 ML/day, and

Note. 4.39 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 3.

(iii) in B class flows, the flow occurring in this zone minus 5.59 ML/day.

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- Note.** 5.59 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 3.
- (d) In Zone 4:
- (i) in very low flows, the flow occurring in this zone minus 0.33 ML/day,
Note. 0.33 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 4.
- (ii) in A class flows, the flow occurring in this zone minus 6.73 ML/day, and
Note. 6.73 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 4.
- (iii) in B class flows, the flow occurring in this zone minus 14.73 ML/day.
Note. 6.73 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 4.
- (e) In Zone 5:
- (i) in very low flows, the flow occurring in this zone minus 0.5 ML/day,
Note. 0.5 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 5.
- (ii) in A class flows, the flow occurring in this zone minus 6.0 ML/day, and
Note. 6.0 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 5.
- (iii) in B class flows, the flow occurring in this zone minus 8.5 ML/day.
Note. 8.5 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 5.
- (f) In Zone 6, the flow occurring in this zone minus 2.14 ML/day and minus the total extraction under all access licences in this zone.
Note. 2.14 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 6.
- (2) Environmental health water is maintained as follows:
- (a) In very low flows:
- (i) the holders of access licences, except the holder of the access licence listed in Schedule 6, are not permitted any access in Zones 1 to 5,
- (ii) persons exercising domestic and stock and native title rights may take up to:
- (1) 0.12 ML/day in Zone 1,
 - (2) 0.72 ML/day in Zone 2,
 - (3) 0.19 ML/day in Zone 3,
 - (4) 0.33 ML/day in Zone 4,
 - (5) 0.5 ML/day in Zone 5, and
 - (6) 2.14 ML/day in Zone 6.

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Note. The licence listed on Schedule 6 may access water in management zone 3 in the very low flow class in accordance with clause 62 (2) (d).

Note. The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

- (b) In both A class and B class flows:
- (i) the holders of access licences have restricted access to water as specified in clause 45,
 - (ii) persons exercising domestic and stock and native title rights may take water,
 - (iii) if the water taken under domestic and stock and native title rights is assessed to be exceeding 0.12 ML/day in Zone 1, 0.72 ML/day in Zone 2, 0.19 ML/day in Zone 3, 0.33 ML/day in Zone 4, 0.5 ML/day in Zone 5, and 2.14 ML/day in Zone 6, the access to water for access licences will be reduced in accordance with clause 50 to maintain the environmental water in this flow class, and
 - (iv) the holders of unregulated river access licences have access to water only as specified in clauses 62 and 63.
- (c) In all flow classes, limits are imposed on the availability of water in accordance with clauses 35 and 37, that protect a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction.

Note. These rules protect the water for the environment by limiting both water extracted over the long-term and the rate of extraction of water in different flow ranges, thereby achieving the objectives of this Plan.

Note. This Plan recognises that the environmental health water provisions provide non-extractive benefits, including traditional Aboriginal spiritual, social, customary and cultural benefits and contributes to improved water quality.

22 Extraction by water supply work

Notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only if there is visible flow in the river below and in the vicinity of the work.

23 Supplementary environmental water

At the commencement of this Plan, there is no water committed for specified environmental purposes in accordance with section 8 (1) (b) of the Act.

24 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there is a contribution to the objectives of this Plan.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 5 Basic landholder rights

25 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

Note. The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

26 Domestic and stock rights

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights in this water source are estimated to be a total of 4 ML/day.
- (2) The provision for domestic and stock rights within each of the management zones are estimated to be as follows:
 - (a) 0.12 ML/day in Zone 1,
 - (b) 0.72 ML/day in Zone 2,
 - (c) 0.19 ML/day in Zone 3,
 - (d) 0.33 ML/day in Zone 4,
 - (e) 0.5 ML/day in Zone 5, and
 - (f) 2.14 ML/day in Zone 6.
- (3) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in this water source and/or as a result of an increase of the exercise of basic landholder rights by existing landholders.

27 Native title rights

- (1) At the commencement of this Plan there are no holders of native title rights and therefore the water requirements for native title rights are a total of 0 ML/day.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note. Increase in use of native title rights may occur as a result of the granting of native title rights under the Commonwealth's *Native Title Act 1993*.

28 Harvestable rights

The requirement for water under harvestable rights is the amount of water owners of land are entitled to capture pursuant to the harvestable rights Order published in the NSW Government Gazette on 23 March 2001 under section 54 of the Act.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 6 Bulk access regime

29 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climatic variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 9 Division 2 of this Plan,
 - (e) establishes rules according to which access licences are managed as provided for in Part 10 of this Plan, and
 - (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Parts 9 and 10 of this Plan.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 7 Requirements for water under access licences

30 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The amount of water specified in this Part represents the total volumes specified on access licences in this water source. It is not a commitment to supply that water.

31 Estimate of water requirements

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, the requirements identified for water for extraction under access licences within this water source will total approximately 5,000 megalitres per year (hereafter *ML/yr*), distributed as follows:
 - (a) 920 ML/yr in Zone 1,
 - (b) 1950 ML/yr in Zone 2,
 - (c) 230 ML/yr in Zone 3,
 - (d) 745 ML/yr in Zone 4,
 - (e) 615 ML/yr in Zone 5, and
 - (f) 525 ML/yr in Zone 6.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, there will be no runoff harvesting access licences in this water source.
- (3) This Plan recognises that the total requirements for water for extraction within this water source may change during the term of this Plan as a result of:
 - (a) the granting, surrender, cancellation or non-renewal of access licences, or
 - (b) variations to local water utility licences arising from sections 66 (3) or 66 (4) of the Act.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Part 8 Rules for granting access licences

32 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in this water source and the need to protect the ecological health of the river.
- (2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than access licences of the following kinds:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) domestic and stock access licences,
 - (c) an access licence resulting from an application of a type listed in section 82 (1) of the Act, or
 - (d) unregulated river (Aboriginal cultural) access licences where the share components should not exceed 10 ML/yr per application.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share and extraction components sought will be the minimum required to meet that purpose and circumstance.
- (5) Subclause (4) does not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.
- (6) Any individual daily extraction limit (hereafter **IDEL**) granted in accordance with this clause cannot exceed the IDEL initially assigned to an equivalent share component for that category of access licence, as varied by clause 50.
- (7) In accordance with section 56 of the Act, all access licences in this water source shall have a share component expressed as a volume in ML/yr.
- (8) Notwithstanding subclause (7), runoff harvesting access licences may have the share component expressed either as a volume in ML/yr or in terms of the amount of water that can be extracted from time to time from specified works.

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Part 9 Limits to the availability of water

Division 1 Long-term average extraction limit

33 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

34 Extraction management unit

Management of the long-term extraction of water in this water source will be undertaken in the context of the Castlereagh Valley Extraction Management Unit (hereafter *this Unit*) referred to in clause 16.

35 Long-term average extraction limit

The long-term average extraction limit for this Unit of which this water source is a part will be the total of:

- (a) the estimated annual extraction of water averaged over the period from July 1993 to June 1999 specified on licence conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in this Unit, immediately prior to the commencement of Part 2 of Chapter 3 of the Act for this Unit, and
- (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in this Unit at the commencement of this Plan.

36 Variation of the long-term average extraction limit

The long-term average extraction limit of this Unit may be varied by the Minister if dealings under Part 11 of this Plan result in the issuing or cancellation of access licences in this Unit.

Division 2 Available water determinations

37 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
 - (a) water extraction in this Unit will be monitored in each water accounting year to determine if there is any growth in volumes extracted above the extraction limit specified in clause 35, based on comparison of the extraction limit against the average extraction within this Unit over that year and the preceding 2 years,

Note. A water accounting year is defined in clause 42 (3).

- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in a river for environmental purposes, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,

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- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work,
- (d) for all access licences, an initial available water determination, of such volume of water as is equivalent to two times the access licence share component, should be made on 1 July 2003, and such determination should apply for one water accounting year,
- (e) from 1 July 2004, available water determinations for local water utility and domestic and stock access licences should be of such volume of water as is equivalent to the access licence share component, with priority given to making this water available above the making of water available to all other categories of access licence, and such determinations should be made annually,
- (f) from 1 July 2004, available water determinations for unregulated river access licences, including all subcategories, should be such volume of water as is equivalent to the access licence share component, except as provided in subclauses (g) and (h), and such determinations should be made annually,
- (g) if the 3 year average of extraction in this Unit exceeds the long-term average extraction limit established in clause 35 by 5% or greater, then the available water determination for the following water accounting year for unregulated river access licences in this water source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
- (h) if the 3 year average of extraction in this Unit is less than 95% of the long-term average extraction limit established in clause 35, the available water determination for unregulated river access licences in this water source shall be increased to such an extent as to allow extraction to increase to that extraction limit,
- (i) notwithstanding subclause (h), the available water determination shall not exceed 100% of total access licence share components,
- (j) a new available water determination for unregulated river access licences determined under subclause (g) or (h) should be repeated for each of the subsequent two water accounting years unchanged in quantity, and
- (k) available water determinations for runoff harvesting access licences should be made annually and should be either the access licence share component or the water that can be extracted from time to time from the approved works, depending on the manner in which the share component is expressed on the licence.

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Part 10 Rules for managing access licences

Division 1 General

38 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 21 (a) and 21 (c) of the Act, having regard to:

- (a) the environmental water rules established in Part 4 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 5 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 7 of this Plan.

Division 2 Water allocation account management

39 Water allocation account management

This Division is made in accordance with sections 20 (2) (b) and 21 (c) of the Act.

40 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.

Note. Water allocations may be assigned to, or from, these accounts by a water allocation assignment made under section 71G of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Note. Water allocations may also be recredited to these accounts in accordance with section 76 of the Act, subject to the operation of a return flows scheme established under section 75 of the Act.

41 Accrual of water allocations

Water allocations will be accrued into water allocation accounts in accordance with the Minister's available water determinations as specified in clause 37.

42 Annual accounting for water extraction

- (1) Water taken from this water source will be accounted for at least annually.
- (2) Water extracted by a water supply work nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) The maximum water allocation that can be carried over from one water accounting year to the next is as follows:
 - (a) 100% of the access licence share component from 2003/4 to 2004/5,
 - (b) 200% of the access licence share component from 2004/5 to 2005/6, and
 - (c) thereafter, the sum of the previous two available water determinations.

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- (5) Notwithstanding subclause (4) total water in any water allocation account cannot exceed 3 times the share component of the access licence:
 - (a) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in that year,
 - (b) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (c) minus any water allocations assigned to another licence by a water allocation assignment under section 71 G of the Act in that year.
- (6) In any one water accounting year, water taken from this water source under an access licence may not exceed a volume consisting of:
 - (a) twice the water allocation accrued under the licence that year,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in that year,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71 G of the Act in that year.
- (7) A water allocation account shall remain at or above zero at all times.

43 Three year accounting for water extraction

- (1) Water taken from this water source in any 3 consecutive water accounting years under an access licence may not exceed a volume consisting of:
 - (a) the water allocations accrued under the licence in those years,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71 G of the Act in those years.
- (2) Notwithstanding subclause (1), water taken under an access licence from this water source in the first 3 water accounting years of this Plan may not exceed a volume consisting of:
 - (a) 3 times the share component of the access licence,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71G of the Act in those years.

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Division 3 Sharing flows on a daily basis

44 Sharing flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act.

45 Total daily extraction limits

- (1) This Plan establishes a total daily extraction limit (hereafter **TDEL**) for each flow class as follows:

(a) Zone 1:

- (i) 9.4 ML/day for A class, and
- (ii) 14.0 ML/day for B class.

Note. These flows represent 53% of the top of A class flows (which is at the 19th percentile) and 26% of the top of B class flows (which is at the 9th percentile) of all days flow.

(b) Zone 2:

- (i) 11.3 ML/day for A class, and
- (ii) 17.2 ML/day for B class.

Note. These flows represent 55% of the top of A class flows (which is at the 15th percentile) and 28% of the top of B class (which is at the 8th percentile) of all days flow.

(c) Zone 3:

- (i) for the very low flow class, 0.2 ML/day in accordance with clause 62,
- (ii) 4.2 ML/day for A class, and
- (iii) 5.4 ML/day for B class.

Note. These flows represent 51% of the top of A class flows and 9% of the top of B class of all days flow.

(d) Zone 4:

- (i) 6.4 ML/day for A class, and
- (ii) 14.4 ML/day for B class.

Note. These flows represent 36% of the top of A class flows (which is at the 43rd percentile) and 14% of the top of B class (which is at the 15th percentile) of all days flow.

(e) Zone 5:

- (i) 5.5 ML/day for A class, and
- (ii) 8.0 ML/day for B class.

Note. These flows represent 56% of the top of A class flows (which is at the 40th percentile) and 14% of the top of B class flows (which is at the 11th percentile) of all days flow.

- (f) At the commencement of this Plan, TDELs have not been established for Zone 6.

Note. All water supply works located in Zone 6 are subject to the condition stated in clauses 22 and 68 (d) which only allow water to be extracted where there is a visible flow in the river in the downstream vicinity of the water supply work.

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- (2) The TDEL for each flow class in each management zone specified in subclause (1) applies to all rivers within that management zone apart from those rivers identified as minor streams in a harvestable rights Order made under section 54 of the Act.

Note. The harvestable rights Order applying to this area at the commencement of this Plan is that gazetted on 23 March 2001 under section 54 of the Act. It identifies minor streams as non-permanent 1st and 2nd order streams as shown on topographic maps.

46 Initial assignment of the TDEL to categories of access licence

The TDEL for each flow class will initially be assigned to categories of access licences according to the following:

- (a) Zone 1:
- (i) Domestic and stock access licences:
 - (1) 0 ML/day for A class, and
 - (2) 0 ML/day for B class.
 - (ii) Local water utility access licences:
 - (1) 3.5 ML/day in A class, and
 - (2) 3.5 ML/day in B class.
 - (ii) Unregulated river access licences:
 - (1) 5.9 ML/day in A class, and
 - (2) 10.5 ML/day of B class.
- (b) Zone 2:
- (i) Domestic and stock access licences:
 - (1) 0 ML/day for A class, and
 - (2) 0 ML/day for B class.
 - (ii) Local water utility access licences:
 - (1) 0 ML/day in A class, and
 - (2) 0 ML/day in B class.
 - (iii) Unregulated river access licences:
 - (1) 11.3 ML/day in A class, and
 - (2) 17.2 ML/day of B class.
- (c) Zone 3:
- (i) Domestic and stock access licences:
 - (1) 0.1 ML/day in A class, and
 - (2) 0.1 ML/day in B class.
 - (ii) Local water utility access licences:
 - (1) 0 ML/day in A class, and
 - (2) 0 ML/day in B class.

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- (iii) Unregulated river access licences:
 - (1) for the licence listed on Schedule 6, 0.2 ML/day of the very low flow class in accordance with clause 62,
 - (2) 4.1 ML/day in A class, and
 - (3) 5.3 ML/day of B class.
- (d) Zone 4:
 - (i) Domestic and stock access licences:
 - (1) 0 ML/day in A class, and
 - (2) 0 ML/day in B class.
 - (ii) Local water utility access licences:
 - (1) 1 ML/day in A class, and
 - (2) 1 ML/day in B class.
 - (iii) Unregulated river access licences:
 - (1) 5.4 ML/day in A class, and
 - (2) 13.4 ML/day of B class.
- (e) Zone 5:
 - (i) Domestic and stock access licences:
 - (1) 0 ML/day in A class, and
 - (2) 0 ML/day in B class.
 - (ii) Local water utility access licences:
 - (1) 0 ML/day in A class, and
 - (2) 0 ML/day in B class.
 - (iii) unregulated river access licences:
 - (1) 5.5 ML/day in A class, and
 - (2) 8.0 ML/day of B class.

47 Unassigned TDEL

At the commencement of this Plan, there is no unassigned TDEL.

Note. Unassigned TDEL may vary as a result of the surrender, cancellation or non-renewal of an access licence's IDELs, or the operation of Part 8 of this Plan.

48 Daily extraction limits for individual access licence holders

- (1) Each access licence in a management zone requiring an IDEL, as specified in Part 12 of this Plan, is assigned the same proportion of the TDEL for that management zone, as specified in clause 46 as its share component bears to all the share components of licences of that category in that management zone.
- (2) Notwithstanding subclause (1), in relation to those access licences that are currently excluded from a flow class or part of a flow class by existing conditions

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on the access licence or the water supply work nominated by the access licence, the IDEL resulting from subclause (1) will be adjusted to reflect as far as possible such an exclusion.

49 Granting of unassigned TDEL

- (1) The unassigned TDEL in clause 47 may be assigned to access licences in the following circumstances:
 - (a) where they are applied for as part of a new access licence application,
 - (b) to a local water utility access licence where the Minister varies the access licence in accordance with sections 66 (3) or 66 (4) of the Act, or
 - (c) to existing access licences for the purpose of pumping into a farm dam if:
 - (i) the purpose of the additional IDEL sought is established by the proponent,
 - (ii) the IDEL sought is the minimum required to satisfy that purpose, and
 - (iii) the extraction is consistent with the objectives and principles of this Plan.
- (2) Where additional IDELs are assigned to an access licence in accordance with this clause, the amount of IDEL so assigned shall be determined by the Minister consistent with the ratios of share component to IDEL for the specific category of access licence as initially assigned under clause 48, as amended by clause 50.

50 Adjustment to TDELS and IDELS

- (1) Where IDELs are assigned under clause 49 the unassigned TDEL in the specified management zone is reduced accordingly, and the TDEL assigned to the appropriate licence category in the management zone specified in clause 46 is increased accordingly.
- (2) Pursuant to section 42 (2) of the Act, if total extraction of water under domestic and stock or native title rights in a management zone exceeds the level specified in Part 5 of this Plan,
 - (a) first the unassigned TDEL specified in clause 47 for that management zone, then, if necessary, the TDEL for unregulated river access licences in clauses 46 for that management zone shall be diminished to allow these additional basic landholder rights to be met, and
 - (b) the IDELs of each unregulated river access licence in the specified management zone will then be reduced to comply with this diminished TDEL.
- (3) Pursuant to section 42 (2) of the Act, if any unassigned TDEL cannot meet either:
 - (a) the IDEL requirements of applicants for new access licences for domestic and stock access and unregulated river (Aboriginal cultural) access, or
 - (b) a local water utility's IDEL requirements in a specified management zone resulting from a variation by the Minister under sections 66 (3) or 66 (4) of the Act,then the TDEL for unregulated river access licences in clause 46 will be diminished to such an extent as to allow those requirements to be met.

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- (4) Following an adjustment to the TDEL for unregulated river access licences in subclause (3) the IDELS of each unregulated river access licence in the specified management zone will then be reduced to comply with this diminished TDEL,
- (5) Any adjustment to unregulated river access licence IDELS arising from this clause will be done at intervals of no greater than 5 years,
- (6) Where in accordance with clause 75, the Minister establishes C class TDELS, and, an access licence holder applies to surrender A or B class IDELS in exchange for C class IDELS in a specified management zone:
 - (a) the unassigned TDEL in C class in the specified management zone in clause 47 shall be reduced by the amount of C class IDEL issued,
 - (b) the A or B class TDELS in the specified management zone in clause 45 shall be reduced by the amount of A or B class IDEL surrendered, and
 - (c) the A or B class TDELS for unregulated river access licences in the specified management zone in clause 46 shall be reduced accordingly.

Note. If C class TDELS are recommended following the review established at clause 75, unassigned C class TDEL will be created, with the volume created being identified at clause 47.
- (7) If water that, pursuant to an access licence:
 - (a) is committed as adaptive environmental water, then the TDEL for classes specified on the committed access licence in the specified category in the specified management zone will be reduced by the IDEL on the access licence so committed and clauses 45 and 46 adjusted accordingly, or
 - (b) is uncommitted to adaptive environmental water, then the TDEL for classes specified on the committed access licence in the specified category in the specified management zone will be increased by the IDEL on the access licence so uncommitted and clauses 45 and 46 adjusted accordingly.

51 Administrative arrangements for managing access to daily flows

- (1) Notwithstanding the forgoing provisions of this Division, this Plan allows group management of access licences with respect to the IDELS.
- (2) The Minister may determine that, from the commencement of this Plan and until otherwise determined:
 - (a) all access licences within a management zone with IDELS shall be made part of a group maintained by the Minister, and
 - (b) access licences within a management zone with IDELS will be assessed as a whole against their combined IDELS.
- (3) At any time when subclause (2) above does not apply:
 - (a) access licence holders within a management zone may make a request to form a group for their access licences,
 - (b) access licence holders may have their access licence removed from a group, in which case they shall be permitted to extract under that licence a maximum of the IDEL on the subject access licences, and

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- (c) where an access licence is removed or added to a group, the group combined IDEL shall be adjusted by the amount of IDEL on the subject licence.
- (4) Groups will be managed according to the following rules:
 - (a) daily extraction by a group cannot exceed the combined IDELs of all access licences in the group,
 - (b) where it has been assessed that a holder of an access licence within a group is repeatedly causing the combined IDEL to be exceeded then the Minister may remove that access licence from the group,
 - (c) where daily extraction by a group exceeds the combined IDELs of all access licences in the group, then the Minister may dissolve the group and require each access licence holder to comply with the IDELs on the subject access licences,
 - (d) should a holder of an access licence which is part of a group commit the IDELs of that licence to the environment consistent with section 8 (1) (c) of the Act, then those IDELs shall be removed from the group, and
 - (e) the Minister may refuse to allow an access licence to be included in a group, and may refuse a request to form a group.

Note. The Minister may allow an access licence that is linked to a water supply works approval that nominates more than one management zone to be placed in more than one approved group. The IDEL of access licences in this category may only be accessed in any one management zone on any given day.

52 Infrastructure failure

In the event of infrastructure failure, the Minister can elect to:

- (a) continue to announce the current flow class,
- (b) announce another flow class based on climatic conditions and any other flow gauging information, or
- (c) restrict access to water to the lowest flow class.

Note. Infrastructure is defined in the dictionary.

Note. If satisfied that it is necessary to do so in the public interest, the Minister may direct the holders of an access licence to cease using a water supply work in accordance with section 323 of the Act.

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Part 11 Access licence dealing rules

53 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act, and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

Note. The Minister's access licence dealing principles are contained in Appendix 4.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. There are a number of mechanisms within the Act, called access licence dealings, to change either the ownership of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised. These dealings are governed by the principles in section 5 of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

54 Rules relating to constraints within this water source

- (1) This clause applies to any relevant dealings under sections 71D, 71F and 71J of the Act, and with respect to water allocation assignments within this water source under section 71G of the Act.

- (2) Dealings are prohibited under this clause if:

- (a) any of the access licences or water allocations involved are not within this water source, unless the dealing is permitted under clause 59, or

Note. Clause 56 relates to any dealings that involve an access licence moving from one water source to another.

- (b) the dealing would result in the access licence extraction component nominating a work in a different management zone, unless provided for in subclause (3), or

- (c) the dealing would result in an access licence extraction component located outside of Shawns Creek nominating a work in Shawns Creek (Shawns Creek is shown on the map in Schedule 2).

- (3) Subject to any review in accordance with clause 75 and after year 5 of this Plan, if there is remaining unassigned C class TDEL in a management zone, an access licence holder may apply to specify additional C class IDELS in return for surrender of A class or B class IDELS, even if the dealing results in the access licence extraction component nominating a work in a different management zone, as long as the dealing is subject to conversion factors established by the Minister pursuant to clause 75.

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55 Rules for access licence dealings which alter the times, rates or circumstances specified access licence extraction components

- (1) Following an amendment to this Plan in accordance with clause 75, a licence holder may apply under section 71F of the Act to alter their access licence extraction component to specify additional C class IDELs, in return for the surrender of A class or B class IDELs.
- (2) A dealing in accordance with subclause (1):
 - (a) can only occur in management zones 1 to 5,
 - (b) can occur within the same management zone from year 1 to 5 of the Plan and are subject to the conversion factors established by the Minister pursuant to clause 75, and
 - (c) can occur between management zones 1, 2, 3, 4 and 5 after year 5 subject to the conversion factors established by the Minister.
- (3) Dealings that assign water allocations between access licences inside this water source, are permitted.

56 Rules for change of water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.
- (2) Dealing under section 71E of the Act are prohibited in this water source, unless provided for in this clause.
- (3) An access licence with a share component specifying this water source may be cancelled and a new licence issued only if the new access licence issued is within this Unit and the access licence dealing rules in the other water source permit such a dealing.
- (4) An access licence with a share component specifying another water source may be cancelled and a new access licence issued in this water source under this dealing only if the access licence dealing rules in the other water source permit such a dealing and:
 - (a) the access licence cancelled is within this Unit, or
 - (b) the access licence cancelled is within the Macquarie regulated river water source.
- (5) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled access licence share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.
- (6) The extraction component of the cancelled access licence is not to be carried over to the new access licence.

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57 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category may be permitted only if:
 - (a) the conversion is from an unregulated river access licence to a runoff harvesting access licence,
 - (b) the conversion is from a runoff harvesting access licence to an unregulated river access licence, or
 - (c) the conversion is from a regulated river access licence to unregulated river access licence.

Note. This will occur directly following a dealing under section 71E of the Act that changes the water source to which the access licence applies.

- (3) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

58 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of this water source are prohibited.

59 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71G of the Act, in relation to water allocation assignments between water sources.
- (2) Dealing under section 71G of the Act that result in water allocation assignments to or from access licences in this water source are prohibited unless provided for in this clause.
- (3) Dealings that assign water allocations between access licences inside this water source and access licences outside of this water source, but inside this Unit, are permitted only if the access licence dealing rules in the other water source permit such a dealing.

Note. Each water allocation assignment must be applied for. Licence holders may enter into private contracts to assign water allocations for a number of years. Such contracts are not guaranteed by the Government, and approval must be sought annually. Approval will be subject to the rules in this Plan, including local impact assessment.

60 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Dealings that result in interstate assignment of water allocations to or from this water source are prohibited.

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Part 12 Mandatory conditions

61 Mandatory conditions on access licences

- (1) This Part is made in accordance with section 17 (c) and 20 (2) (e) of the Act.
- (2) All access licences shall have mandatory conditions to give effect to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence, including IDELs arising from the operation of Part 10 Division 3 of this Plan where applicable, and the variation thereof,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to water allocation account management rules established in Part 10 Division 2 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account,
 - (f) the requirement that water may only be taken under the access licence by the water supply work nominated by the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.

62 Schedule 6 access licence conditions

- (1) Subject to clause 22 and subclause (2) (d) and notwithstanding clause 63 (c) (ii), the access licence listed in Schedule 6 is allowed access to very low flows in Zone 3 until the completion of year 5 of this Plan.
- (2) Access to very low flows identified in subclause (1) is subject to the following conditions:
 - (a) access to the very low flow class is permitted during years 1 to 5 this Plan,
 - (b) no access to the very low flow class is permitted during years 6 to 10 of this Plan,
 - (c) the volume of water that may be extracted is limited to the TDEL specified in clauses 45 (1) (c) (i) and 46 (c) (ii) (1) for Zone 3, and
 - (d) if the access licence on Schedule 6 lapses, is cancelled or is assigned elsewhere, then it will be removed from the schedule.

63 Unregulated river access licences

All unregulated river access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the

 Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

- access licence extraction component (if specified), unless otherwise authorised by a registered group,
- (b) notwithstanding subclause (a), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (c) notwithstanding all other rights and conditions, extraction of water from a river by a water supply work linked to an unregulated river access licence is not permitted:
- (i) in Zone 1, at or below 7.1 ML/day,
Note. The 7.1 ML/day in subclause (c) (i) is referred to as the cease to pump on a falling river and the commence to pump on a rising river for unregulated river access licences. It corresponds to the estimated 34th percentile of all days.
- (ii) in Zone 2, at or below 3.2 ML/day,
Note. The 3.2 ML/day in subclause (c) (ii) is referred to as the cease to pump on a falling river and the commence to pump on a rising river for unregulated river access licences. It corresponds to the estimated 57th percentile of all days.
- (iii) in Zone 3, at or below 3.0 ML/day, unless the access licence is listed on Schedule 6,
Note. The 3.0 ML/day in subclause (c) (iii) is referred to as the cease to pump on a falling river and the commence to pump on a rising river for unregulated river access licences.
- (iv) in Zone 4, at or below 4.3 ML/day, and
Note. The 4.3 ML/day in subclause (c) (iv) is referred to as the cease to pump on a falling river and the commence to pump on a rising river for unregulated river access licences. It corresponds to the estimated 74th percentile of all days.
- (v) in Zone 5, at or below 1.9 ML/day.
Note. The 1.9 ML/day in subclause (c) (v) is referred to as the cease to pump on a falling river and the commence to pump on a rising river for unregulated river access licences. It corresponds to the estimated 93rd percentile.

64 Local water utility access licences

All local water utility access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of supplying water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, and
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.

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65 Domestic and stock access licences

All domestic and stock access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component (if specified), unless otherwise authorised by a registered group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

66 Runoff harvesting access licences

All runoff harvesting access licences shall have a mandatory condition imposed on them stating that water may be taken without restriction in rate, but only from the specified work.

67 Unregulated river (Aboriginal cultural) access licences

All unregulated river (Aboriginal cultural) access licences shall have mandatory conditions to give effect to the following:

- (a) water shall only be taken for Aboriginal personal, domestic and communal purposes including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, hunting, fishing, and gathering, and for recreational, cultural and ceremonial purposes,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component (if specified), unless otherwise authorised by a registered group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

68 Mandatory conditions on water supply works approvals

All approvals for water supply works for this water source shall have mandatory conditions in relation to the following:

- (a) flow measurement devices,
 - (i) shall be installed and maintained on all works used for extraction of water under an access licence, and

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- (ii) shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
- (b) water extraction and property water management infrastructure details shall be provided to the Minister on request,
- (c) it is the responsibility of the work approval holder to ascertain from the Minister the flow class at any time before commencing to take water under an access licence with an IDEL,
- (d) notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work which is not permitted if there is no visible flow in the river below and in the vicinity of the work, and
- (e) extraction under an access licence through an approved work is only authorised with respect to the work nominated by the access licence.

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Part 13 Granting and amending water supply works approvals

69 Granting and amending water supply works approvals

This Part is made in accordance with section 21 (b) of the Act.

70 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence share component specifying the runoff harvesting dam as the nominated work.
- (2) When the water allocations which may be taken from a runoff harvesting dam are reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 11 of this Plan, the Minister may impose an additional condition requiring the dam to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the dam to be reduced, consistent with the reduction in water allocations available.

Note. Extraction of water from a runoff harvesting dam requires a runoff harvesting access licence, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required. Runoff harvesting is a category of access licence to be established by regulation under section 57 (k) of the Act.

71 In-river dams

No new in-river dams shall be approved within this water source.

Note. Taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act.

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Part 14 Monitoring and reporting

72 Monitoring and reporting of performance indicators

The monitoring and reporting of the performance indicators specified in clause 13 shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with a water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the implementation program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program will be included in the annual report for the Department of Land and Water Conservation.

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Part 15 Amendment of this Plan

73 Amendment of this Plan

This Part is made in accordance with section 42 (2) of the Act.

74 Amendment of very low flow provisions

- (1) The Minister may, under section 42 (2) of the Act, and by notice published in the NSW Government Gazette, vary the very low flow levels established in clause 17, and consequently the bottom of A class established in clause 17, and the cease to pump levels for unregulated river access licences in clause 63 (c), following field verification.
- (2) Any variation made under subclause (1) should not result in:
 - (a) the very low flow level in:
 - (i) Zone 1 being less than 2 or greater than 4 ML/day,
 - (ii) Zone 2 being less than 2 or greater than 4 ML/day,
 - (iii) Zone 3 being less than 2 or greater than 3 ML/day,
 - (iv) Zone 4 being less than 2 or greater than 4 ML/day, and
 - (v) Zone 5 being less than 1 or greater than 3 ML/day, and
 - (b) the cease to pump levels for unregulated river access licences in clause 63 (c) in:
 - (i) Zone 1 being less than 6 or greater than 8 ML/day,
 - (ii) Zone 2 being less than 3 or greater than 5 ML/day,
 - (iii) Zone 3 being less than 2 or greater than 4 ML/day,
 - (iv) Zone 4 being less than 3 or greater than 6 ML/day, and
 - (v) Zone 5 being less than 1 or greater than 3 ML/day.
- (3) The Minister should cause the field verification in subclause (1) to be undertaken as soon as practical, but before the review of this Plan under section 43 (2) of the Act.
- (4) The field verification should assess the degree to which the following objectives of the *Water Quality and River Flow Interim Environmental Objectives* (NSW Government 1999) are met:
 - (a) objective 1 - to protect water levels in natural river pools and wetlands during periods of no flow, and
 - (b) objective 2 - to protect natural low flows.
- (5) In undertaking the field verification the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,

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- (ii) the hypotheses tested,
- (iii) the field results and conclusions in terms of the degree to which the objectives in subclause (4) are met,
- (iv) the flow level recommended to meet the objectives in subclause (4), and
- (v) the socio-economic impacts of recommended changes to the flow level.

75 Amendment of high flow provisions

- (1) The Minister may, under section 42 (2) of the Act and by notice published in the NSW Government Gazette and following verification of the demand for high flow C class extraction in Zones 1 to 5,
 - (a) establish C class flow categories and thresholds in clause 17,
 - (b) amend clause 21 to allow for environmental health water to be established in C class,
 - (c) establish TDELs for C class in Zones 1 to 5 in clause 44,
 - (d) assign TDELs for C class to categories of access licence in Zones 1 to 5 in clause 45,
 - (e) vary the unassigned TDEL in clause 47,
 - (f) recommend conversion factors for the surrender of A class IDEL in exchange for C class IDEL at clause 55, and
 - (g) recommend conversion factors for the surrender of B class IDEL in exchange for C class IDEL at clause 55.
- (2) The verification process identified in subclause (1) should:
 - (a) only assess the demand for C class extraction by access licences that exist at the commencement of this Plan, and
 - (b) assess the degree to which objective 3 (to protect or restore a portion of freshes and high flows) of the *Water Quality and River Flow Interim Environmental Objectives* (NSW Government 1999) is met.
- (3) Any establishment of C class under subclause (1) (a) should not result in the B class/ C class flow threshold being:
 - (a) less than 32 ML/day or greater than 64 ML/day in Zone 1,
 - (b) less than 38 ML/day or greater than 74 ML/day in Zone 2,
 - (c) less than 14 ML/day or greater than 74 ML/day in Zone 3,
 - (d) less than 33 ML/day or greater than 121 ML/day in Zone 4, and
 - (e) less than 18 ML/day or greater than 68 ML/day in Zone 5.
- (4) Any establishment of TDELs for C class under subclause (1) (c) should not result in C class TDELs being:
 - (a) less than 14 ML/day or greater than 24 ML/day in Zone 1,
 - (b) less than 17 ML/day or greater than 79 ML/day in Zone 2,

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- (c) less than 5 ML/day or greater than 25 ML/day in Zone 3,
 - (d) less than 14 ML/day or greater than 47 ML/day in Zone 4, and
 - (e) less than 8 ML/day or greater than 53 ML/day in Zone 5.
- (5) The Minister should cause the verification of the demand for C class extraction in subclause (1) to be undertaken at the same time as the review of this Plan under section 43 (2) of the Act.
- (6) In undertaking the verification the Minister should:
- (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the results and conclusions in terms of the degree to which the objective in subclause (2) is met,
 - (iv) how any C class flow thresholds and/or C class TDELS recommended will meet the objective in subclause (2), and
 - (v) the socio-economic impacts of recommended changes to the flow level.

76 Review of field verification

- (1) The Minister should seek advice from a review body on the field verification reports specified in clause 74 (5) (b) or 75 (8) (b) before varying this Plan in accordance with clauses 74 (1) and 75 (1), if the field verification reports recommend a variation in the very low flow established in clause 17 or the establishment of C class TDEL.
- (2) This review body may be:
- (a) a water management committee with water sharing responsibilities for this water source if one exists,
 - (b) an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a water management committee referenced at subclause (a), or
 - (c) if there is no water management committee with water sharing responsibilities for this water source, then by a catchment management board with responsibilities for this water source or an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a catchment management board.
- (3) The review body should provide advice to the Minister on the field verification report, and advise on any changes to the recommendations contained in the report in relation to any variation of the very low flow levels or the establishment of C class extraction.
- (4) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date at the latest.

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77 Other amendment of this Plan

This Plan can be amended in accordance with clause 50 in respect to extraction limits of this Plan.

Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

account water is the balance in an access licence water allocation account at a particular time.

Note. An access licence water allocation account records water allocations accrued under the licence as well as water allocations taken, assigned or re-credited. The operation of the account is also governed by rules for the carrying over of credits from one accounting period to the next and rules for the maximum credit that may be allowed to accumulate in the account as established in a water sharing plan. Water allocations are the shares of available water accrued under an access licence from time to time as a result of available water determinations.

Cap is the long-term average annual volume of water that would have been diverted under the development and management conditions defined in Schedule F of the Murray Darling Basin Agreement.

conversion factor refers to the adjustment factor that is to be applied to share components when they are cancelled or reissued in a different water source and visa versa, or when the licence category is changed. It is designed to provide for the fact that the value of a unit of share component in terms of the average water allocations that result from it may vary from one water source to another, or from one category of licence to another.

endangered ecological communities means ecological communities listed in Schedule 1 of the *Threatened Species Conservation Act 1995* or Schedule 4 of the *Fisheries Management Act 1994*.

extraction limit is a limit on the amount of water that may be extracted from an extraction management unit.

extraction management unit is a group of water sources for the purpose of managing annual average extraction.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs. See also **in-river dam** and **runoff harvesting dam**.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) very low flows may be a class on their own,
- (b) low flows may be categorised as 'A' class,
- (c) moderate flows may be categorised as 'B' class,
- (d) high flows may be categorised as 'C' class,
- (e) very high flows may be categorised as 'D' class, and
- (f) extremely high flows may be categorised as 'E' class.

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

individual daily extraction limit (IDEL) is the volume of water that may be extracted by an individual access licence from an unregulated river on a daily basis from a particular flow class.

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infrastructure includes, but is not limited to, a:

- (a) flow gauging device or any other appliance that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated, or
- (b) flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within this water source.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher order rivers are as defined in the Order made under section 5 of the *Water Act 1912* in relation to the definition of a “river” gazetted 23rd March 2001. See also *farm dam* and *runoff harvesting dam*.

management zone is an area within the water source in which daily extraction limits may be defined or where dealing restrictions are approved. Management zones may be designated where the water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area. They may also be designated where local dealing restrictions are in place.

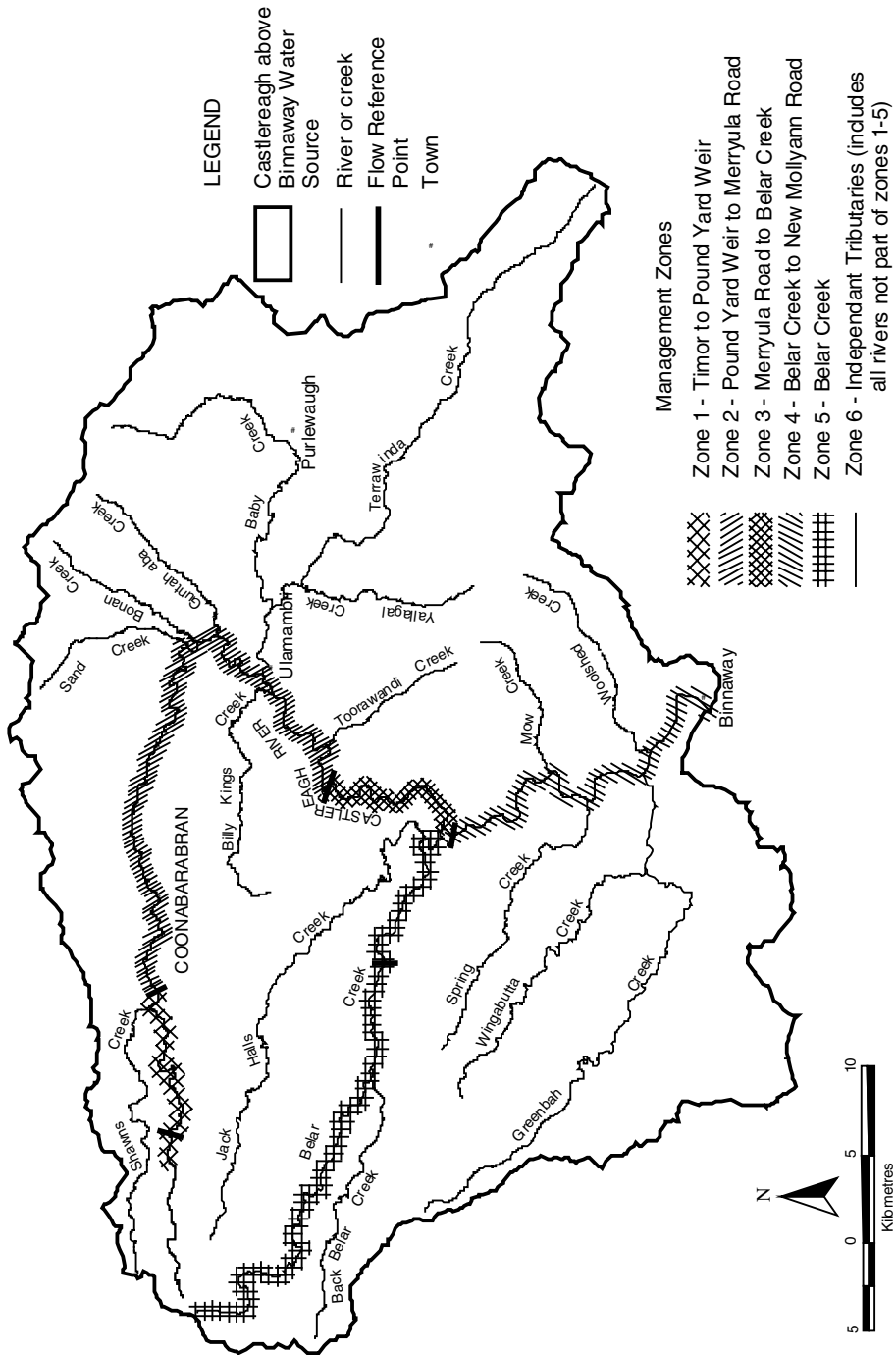
runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the Order made under section 5 of the *Water Act 1912* in relation to the definition of a river gazetted 23rd March 2001. See also *farm dam* and *in-river dam*.

Note. This Order refers to watercourses shown as blue lines on topographic maps. The lines which are uppermost in a catchment are 1st order streams, when two 1st order streams are joined they make a 2nd order stream, etc. For more information see the Farm Dams Assessment Guide available from the Department of Land and Water Conservation.

total daily extraction limit (TDEL) is the volume of water that may be extracted under access licences from an unregulated river on a daily basis from a particular flow class.

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Schedule 2 Castlereagh River above Binnaway Water Source



Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003

Schedule 3 Rivers in the Castlereagh River above Binnaway Water Source

This water source includes:

Baby Creek	Back Belar Creek
Belar Creek	Billy Kings Creek
Bittingtons Spring Gully	Black Gully
Black Swamp	Bonan Creek
Boogadah Gully	Bow Lane Creek
Box Ridge Creek	Buckleys Creek
Bungabah Creek	Bushranger Creek
Chinamans Gully	Colwells Gully
Cutlers Camp Creek	Deadmans Gully
Dog Trap Creek	Flaggy Creek
Fox Creek	Front Creek
Greenbah Creek	Gundi Creek
Guntahaba Creek	Hungerford Swamp
Jack Halls Creek	Jews Gully
Kamilaroi Waterholes	Long Gully
Merryula Creek	Mobara Creek
Mountain Creek	Mow Creek
Myall Plains Creek	Nandi Creek
Pipe Clay Creek	Popagundi Creek
Saigus Gully	Salty Creek
Sand Creek	Sandy Creek
Sawpit Gully	Shawns Creek
Spring Creek	Stanley Creek
Tenandra Creek	Terrawinda Creek
Toorawandi Creek	Urabrible Creek
Washpool Creek	Wingabutta Creek
Woolshed Creek	Yallagal Creek

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Schedule 4 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL – contributes to target in full

HIGH - while not fully contributing to target, there is a good level of contribution

PARTIAL - goes some way to contributing to the target

LOW - only small degree of contribution to the target

Relevant target	Level of contribution	Comments
Target 1b Extractions in Murray-Darling Basin's unregulated rivers limited to the Murray Darling Basin Ministerial Council Cap level	FULL	<ul style="list-style-type: none"> This Plan sets out the basis for the extraction limit for Castlereagh valley unregulated system. The extraction limit is clearly defined as the surveyed average of usage during the period 1993/94-1999/2000. Rules set out in Part 9 of this Plan.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon	FULL	<ul style="list-style-type: none"> Rules set out in Part 9 of this Plan.
Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes	HIGH	<ul style="list-style-type: none"> Provides a low level of protection to very low flows at the commencement of this Plan, but the field verification provisions permit this to increase if warranted. This Plan puts in place daily extraction limits to improve protection of low and moderate flows. Access to high flows is at a B class rate from commencement, however a review clause allows the establishment of C class following the surrender of A or B Class TDELs. 3 listed threatened fish species are likely to occur in the Castlereagh (silver perch, purple spotted gudgeon & olive perchlet) but no recovery plans in place, therefore no specific provisions in this Plan. This Plan provides specific protection (no dealings or assignments into Shawns Creek) for Shawns Creek which supports numerous threatened and at risk species.

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<p>Target 4a Wherever the frequency of “end of system” daily flows would be less than 60% of the predevelopment level without environmental water rules or extraction limits, the flows increased to 60% of predevelopment levels or increased by at least 10% of the predevelopment frequency</p>	PARTIAL	<ul style="list-style-type: none"> • A class 53% of the flow is protected which is greater than 10% improvement. • B class 65% of the flow is protected. • There is no C class TDEL at the commencement of this Plan. • A review clause in this Plan allows for the establishment of C class TDEL following the surrender of A or B class TDEL. • Rules set out in Part 10 of this Plan.
<p>Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile</p>	PARTIAL	<ul style="list-style-type: none"> • Cease to pump (CTP) levels protect flows below 3.3 ML/day in Zones 1 and 4, below 3.1 ML/day in Zone 2, below 2.4 ML/day in Zone 3, and below 1.6 ML/day in Zone 5 for all days flow from unregulated river access licences, domestic and stock and local water utility access licences. • Preliminary field assessment indicated that 3 ML/day would be adequate to connect pools and riffles (50 mm flow above cease to flow at Hidden Valley gauge site) • This Plan provides for field verification and adjustment of the CTP for each Zone. • Rules set out in Parts 3, 4 and 10 of this Plan.
<p>Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components</p>	FULL	<ul style="list-style-type: none"> • This Plan recognises the annual volumetric entitlements and establishes daily extraction limits for distribution to individual licensees. • Rules set out in Part 10 of this Plan.
<p>Target 6b A pathway for reducing the share components to 200 percent of the long-term average annual extraction limit to be established not later than the end of the term of the SWMOP</p>	NIL	<ul style="list-style-type: none"> • Total licensed share components for the Castlereagh Valley Extraction Management Unit will exceed 200% of extraction limit for this Unit.
<p>Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy</p>	PARTIAL	<ul style="list-style-type: none"> • The Government has established other mechanisms to address this target. • This Plan provides for the issuing of unregulated river access licences for Aboriginal cultural purposes and for adjusting the assigned TDEL to provide an IDEL where such licences are issued.

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		<ul style="list-style-type: none"> This Plan provides market opportunity in this water source.
Target 8 Daily extraction components specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80 percent of stressed unregulated rivers	FULL	<ul style="list-style-type: none"> This Plan establishes TDELs across the whole water source.
Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use	FULL	<ul style="list-style-type: none"> Estimates of domestic and stock basic landholder rights have been provided for each management zone. Cease to pump level will protect flows for domestic and stock, and TDELs also explicitly provide for domestic and stock requirements.
Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed	PARTIAL	<ul style="list-style-type: none"> No Aboriginal community representatives were involved in development of this Plan (although an invitation was extended).
Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them	PARTIAL	<ul style="list-style-type: none"> This Plan does not address specific Aboriginal cultural or traditional requirements and has not identified any sites of particular importance This Plan does provide a level of environmental protection, which should assist in protecting Aboriginal values.
Target 16a All share components of access licences tradeable	FULL	<ul style="list-style-type: none"> Part 11 of this Plan provides for trading of share components or IDELs.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water	FULL	<ul style="list-style-type: none"> This Plan establishes a conversion factor of 1:1 for trading between water sources in the Castlereagh Valley Extraction Management Unit.
Target 16d Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery	FULL	<ul style="list-style-type: none"> This Plan does not impose reduction factors.
Target 16e Any unassigned access rights identified and clear mechanisms established for their future assignment	FULL	<ul style="list-style-type: none"> This Plan provides for assigning of unassigned TDELs.

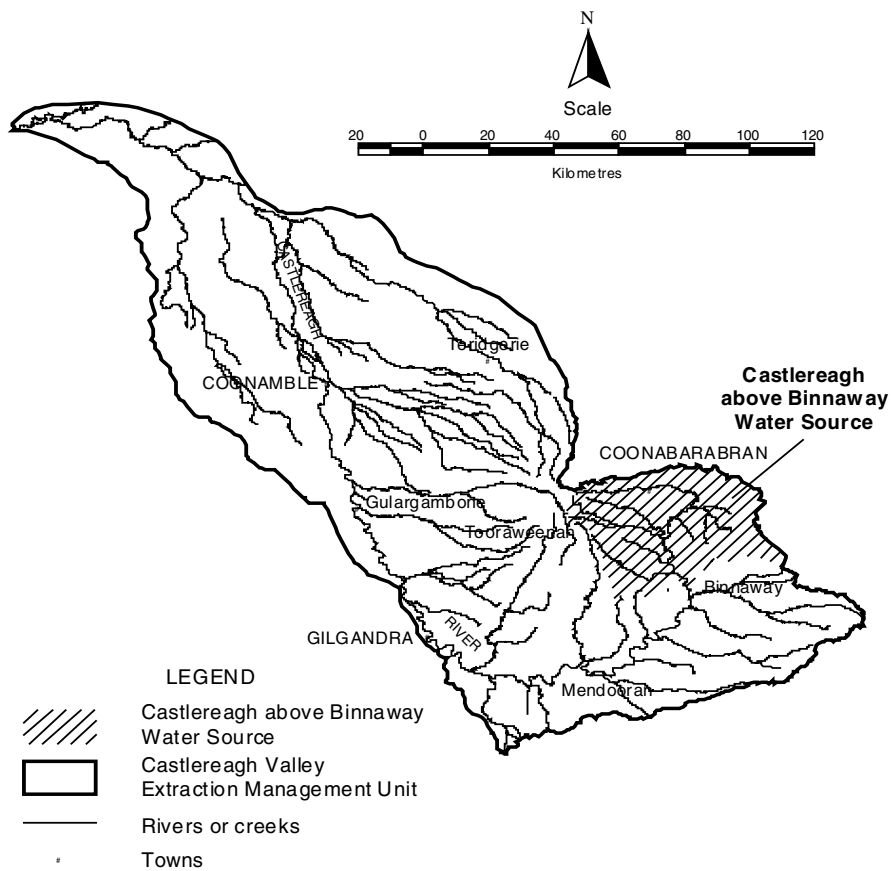
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<p>Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit</p>	<p>HIGH</p>	<ul style="list-style-type: none"> • Dealings in access licence share components may take place within this water source. • Dealings in unregulated river access licence IDELs can take place within management zones, but not between management zones in this water source.
<p>Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • This Plan includes a water quality objective.

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Schedule 5 Castlereagh Valley Extraction Management Unit

This Unit excludes any river that is declared by the Minister, by Order published in the NSW Government Gazette, to be a regulated river.



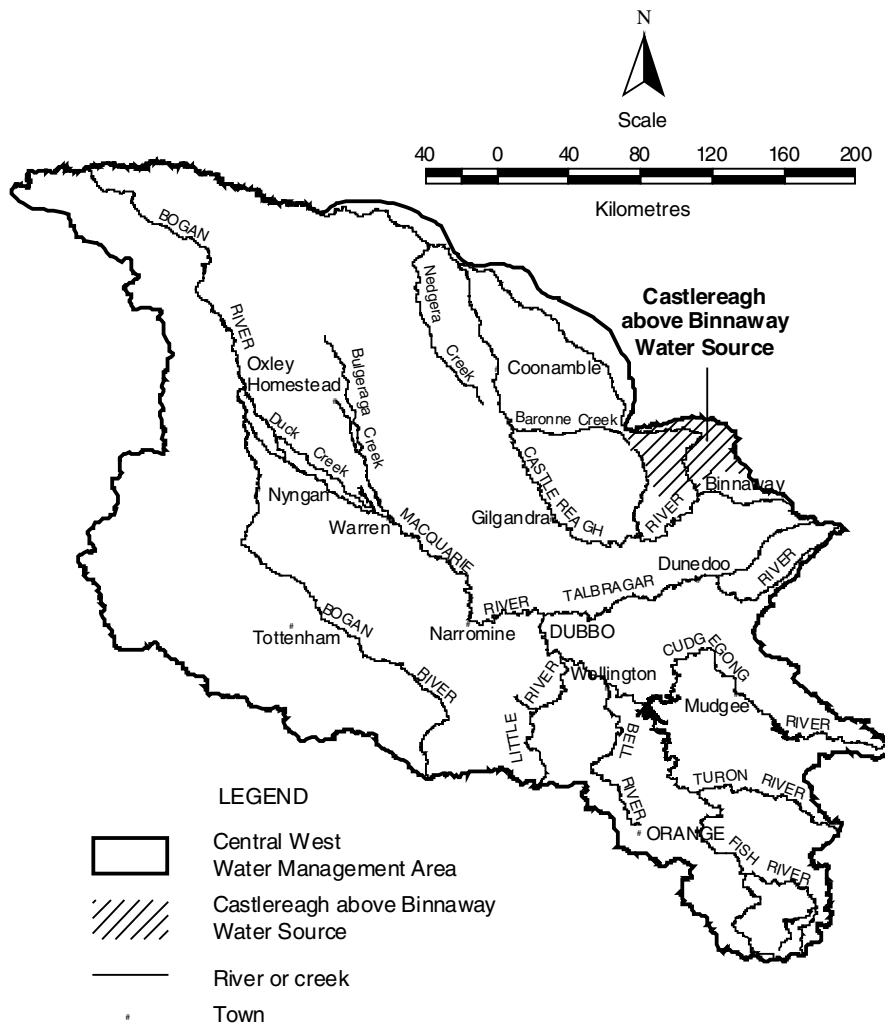
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Schedule 6 Unregulated river access licences with access to very low flows

Licence number 80SL051581 owned by Baiada Pty Ltd. has access to very low flows in Zone 3 in accordance with clause 62 of this Plan.

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Appendix 1 Central West Water Management Area



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Appendix 2 Location of maps

The maps in relation to this Plan may be inspected at:

District Office
Department of Land and Water Conservation
56 Cassillis Street
COONABARABRAN NSW 2357

District Office
Department of Land and Water Conservation
209 Cobra Street
DUBBO NSW 2830

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Appendix 3 Performance indicators

Performance indicators for the Castlereagh River above Binnaway Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
(a) Change in low flows.	11 (a) 11 (b) 11 (d) 11 (f) 11 (m)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> River Flow Objectives (RFOs) 1, 2 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every objective is relevant to every river in NSW. Plan will contribute to a decrease in the frequency and duration of low flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(b) Change in moderate to high flows.	11 (c) 11 (f)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> RFO 3. Plan will maintain or increase the frequency and duration of moderate to high flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(c) Change in local water utilities access.	11 (h)	<ul style="list-style-type: none"> Change in safe yield (<i>safe yield</i> is the annual demand that can be supplied from the water supply headworks and is based on the period of records used and an acceptable level of restriction). 	<ul style="list-style-type: none"> Water sharing plans for unregulated water sources have the potential to impact on urban water supplies.
(d) Change in ecological condition of this water source	11 (a) 11 (b) 11 (c) 11 (d)	<ul style="list-style-type: none"> Periodic assessment of identified indicators for 	<ul style="list-style-type: none"> Water sharing plans are limited to providing for changes in flow regime aimed at improving the conditions for the ecological condition of the

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Performance indicators for the Castlereagh River above Binnaway Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
and dependent ecosystems.	11 (e) 11 (f) 11 (q)	ecological condition.	river. <ul style="list-style-type: none"> • There are many other factors that contribute to ecological objectives. • The focus of this performance indicator will be the effect of flow strategies. Therefore assessment of ecological condition should be based largely on hydrologic parameters (such as wetted area, depth in pools and velocity). This attempts to exclude external, non - water sharing plan related factors (such as climate and catchment landuse changes).
(e)Extent to which basic landholder rights requirements have been met.	11 (g)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. 	<ul style="list-style-type: none"> • Basic landholder rights usage figures in water sharing plans are estimated (not actual use).
(f) Change in economic benefits derived from water extraction and use.	11 (j) 11 (k) 11 (l) 11 (n)	<ul style="list-style-type: none"> • Number of days access provided. • Percentage change in number and volume of farm dams. • Change in unit price of water transferred. 	<ul style="list-style-type: none"> • There are many factors affecting economic status of a region, for example commodity prices. • Measurement of the number of farm dams will attempt to identify the impact of the plan provisions.
(g) Extent to which native title rights requirements have been met.	11 (o)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
(h)Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	11 (a) 11 (b) 11 (c) 11 (d) 11 (f) 11 (o)	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. • The number of licence 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement. • Consultation with the local Aboriginal community will seek to

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Performance indicators for the Castlereagh River above Binnaway Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
		applications referred to the Amaroo Local Aboriginal Land Council.	minimise effects on important social, customary, cultural, and spiritual values.
(i) Contribution to the achievement of water quality to support the environmental values of this water source.	11 (q)	<ul style="list-style-type: none"> Change in the baseline figures of identified water quality variables. 	<ul style="list-style-type: none"> Note that many factors may effect water quality that are not related directly to flow management.

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Appendix 4 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

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groundwater source means a water source specified in a groundwater management plan.

hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or
 - (b) the total volume of water allocations in water allocation accounts, or
 - (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.

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- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
 - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or
 - (c) if the licence is suspended under section 78 of the Act, or

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- (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
- (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.

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- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.

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- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction

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components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and

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- (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
- (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
- (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.

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- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
- (a) if either of the access licences is suspended under section 78 of the Act, or
 - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
- (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and

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- (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or

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- (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
- (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.

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- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P,
Minister for Land and Water Conservation

 Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2003

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Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2003

Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2003

Part 1 Introduction

1 Name of plan

This Plan is the *Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source, 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000 as amended* (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2003 and ceases ten years after that date.

4 Water source and waters to which this Plan applies

- (1) The water source in respect of which this Plan is made is that between the banks of all rivers, from the upstream limit of Windamere Dam water storage downstream to the junctions of the Macquarie River and its effluent rivers with the Barwon River, which, at the date of commencement of this Plan, have been declared by the Minister to be regulated rivers.

Note. A regulated river is a river that has been declared by the Minister, by order published in the New South Wales Government Gazette, to be a regulated river.

Note. The regulated rivers referred to in subclause (1) are listed in Appendix 1.

- (2) The water source shall be known as the Macquarie and Cudgegong Regulated Rivers Water Source (hereafter **this water source**).
- (3) The rivers included in this water source may be varied under section 42 (2) of the Act as set out in Part 14.
- (4) This water source is within the Central West Water Management Area as constituted by the Ministerial Order published in the NSW Government Gazette (hereafter **the Gazette**) on 23 November 2001.

Note. The Central West Water Management Area is shown on the map in Appendix 2.

- (5) This Plan applies to all water contained within this water source but does not apply to water contained within aquifer water sources underlying this water source or to water on land adjacent to this water source.

Note. Management of floodplain harvesting will not be a component of individual water sharing plans being produced for the regulated and unregulated rivers. Management of floodplain harvesting will occur according to a number of state-wide management principles, listed in Appendix 3.

Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2003

5 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan, unless redefined in Schedule 1, and the effect of these terms may be explained in Notes.
- (2) Additional terms are defined in Schedule 1.
- (3) Notes in this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

6 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from the date of commencement to those matters that are being administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible, the rules embodied in this Plan will apply to matters administered under the *Water Act 1912* in the interim.

Note. This Plan replaces any existing water sharing arrangements applying to this water source immediately before the day this Plan took effect, in so far as they relate to matters covered by this Plan.

7 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act this Plan is consistent with the State Water Management Outcomes Plan published in the Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 2 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to meeting those targets.

Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2003

Part 2 Vision, objectives, strategies and performance indicators

8 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

9 Vision

The vision for this Plan is to provide water management in the Macquarie and Cudgegong Regulated Rivers Water Source that supports a healthy environment and a prosperous community.

10 Objectives

The objectives of this Plan are to:

- (a) maintain or enhance the ecological functions and values of riverine environments,
- (b) support a sustainable regional economy,
- (c) protect the social values and benefits provided by the river system, and
- (d) recognise and respect Aboriginal cultural responsibilities and obligations to the landscape.

Note. Although there are no specific strategies directly related to objectives in subclause (c) and (d), the specific environmental water provisions in this Plan and the bulk access regime in general, assists to address these objectives.

11 Strategies

The strategies for reaching the objectives set out in clause 10 are to:

- (a) establish environmental water provisions (Part 3 of this Plan),
- (b) identify water requirements for basic landholder rights (Part 4 of this Plan),
- (c) identify water requirements for access licences (Part 6 of this Plan),
- (d) establish rules for granting of access licences (Part 7 of this Plan),
- (e) establish provisions that place limits on the availability of water (Part 8 of this Plan),
- (f) establish rules for making available water determinations (Part 8 of this Plan),
- (g) establish rules for the operation of water accounts (Part 9 of this Plan),
- (h) establish provisions specifying circumstances under which water may be taken (Part 9 of this Plan), and
- (i) establish access licence dealing rules (Part 10 of this Plan).

12 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flows,

Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2003

- (b) change in moderate to high flows,
- (c) change in water quality in this water source,
- (d) change in ecological condition of this water source and dependent ecosystems,
- (e) change in economic benefits derived from water extraction and use,
- (f) extent to which domestic and stock rights requirements have been met,
- (g) extent to which local water utility and major utility requirements (where major utilities are involved in urban water provision) have been met,
- (h) extent to which native title rights have been met, and
- (i) extent of recognition of spiritual, social and customary values of water to Aboriginal people.

Note. Appendix 4 details the objectives to which these performance indicators relate and the methods for assessing indicators.

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Part 3 Environmental water provisions

13 Environmental water provisions

This Part is made in accordance with sections 5 (3), 8 (1), 8 (2) and 20 (1) (a) of the Act.

14 Environmental health water

This Plan establishes the following environmental health water rules:

- (a) water volume in excess of the long-term extraction limit established in clause 30 of this Plan shall not be taken from this water source and used for any purpose, and
- (b) water availability shall be managed as specified in clause 32 to ensure water volume in excess of the long-term extraction limit is not being taken.

Note. By limiting long-term extractions to an estimated 391,900 megalitres per year this Plan ensures that approximately 73% of the long-term average annual flow in this water source (estimated to be 1,448,000 megalitres per year) will be preserved and will contribute to the maintenance of basic ecosystem health.

15 Supplementary environmental water

- (1) This clause establishes the supplementary environmental water rules for this Plan.
- (2) Subject to the provisions of subclauses (3), (4), (6) and (7), supplementary environmental water releases shall be made from Windamere Dam whenever the sum of storage inflows plus tributary inflows downstream of the Dam is capable of producing a flow in the Cudgegong River at Rocky Water Hole of at least 150 megalitres per day (hereafter *ML/day*) for 2 days or more, subject to any start and finish dates applied under to subclause (4) (a).
- (3) The rate of supplementary environmental water release under subclause (2) shall be the lesser of:
 - (a) storage inflow, and
 - (b) the rate of release necessary to achieve 1,500 ML/day in the Cudgegong River at Rocky Water Hole.
- (4) At the commencement of each water year the Minister, may under section 42 (2) of the Act:
 - (a) set start and finish dates in the water year for which supplementary environmental water releases referred to in subclause (2) can occur, and
 - (b) alter the Cudgegong River at Rocky Water Hole flows referred to in subclauses (2) and (3) (b) providing they remain within the range of 150 to 1,500 ML/day.
- (5) Before taking action under subclause (4) the Minister should seek advice from the Environmental Flow Reference Group if established under subclause (23) regarding the need for, and the extent of any changes.
- (6) Release of supplementary environmental water from Windamere Dam under subclause (2) shall not be made:
 - (a) when the storage level in Windamere Dam water storage is at or below 110,000 megalitres, or

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- (b) after the total volume of water released under subclause (2) during any water year has reached 10,000 megalitres.
- (7) The volume of supplementary environmental water released from Windamere Dam shall be assessed as:
 - (a) the volume of water released under subclause (2) in excess of the volume of releases required to meet access licence water orders in the Cudgegong River downstream of Rocky Water Hole, and
 - (b) zero, when Windamere Dam is spilling.
- (8) Releases of supplementary environmental water from Windamere Dam may not be used to supply access licence requirements between Windamere Dam and the upper limit of Burrendong Dam water storage.
- (9) Once supplementary environmental water released under subclause (2) has entered Burrendong Dam water storage it shall no longer be designated as environmental water.
- (10) An environmental water allowance shall be established for environmental purposes downstream of Burrendong Dam and shall be released as specified in this clause to improve environmental outcomes along the regulated sections of the Macquarie River (excluding its regulated effluents) and the Macquarie Marshes.
- (11) An account of the water credited to and released from the environmental water allowance shall be kept.
- (12) The volumes credited to and debited from the environmental water allowance are to be calculated according to the following:
 - (a) whenever an available water determination is made for regulated river (general security) access licences, the allowance shall be credited with a volume equal to 160,000 megalitres multiplied by the available water determination percentage, except when the available water determination is made pursuant to clauses 38 (6) or 38 (7),
 - (b) if the operation of clause 32 results in the limit to the sum of available water determinations for regulated river (general security) access licences being less than 100% of share components, then, in any water year when the sum of available water determinations for regulated river (general security) access licences reaches the reduced allowable maximum, the environmental water allowance shall continue to be credited as if the maximum allocation for regulated river (general security) access licences had remained at 100% of share components,
 - (c) the volume credited to the allowance shall be distributed between two sub-allowances in the following way:
 - (i) sub-allowance 1 (translucent) is to receive three fifths of the volume, and
 - (ii) sub-allowance 2 (active) is to receive two fifths of the volume,
 - (d) the volume of water debited from the environmental water allowance shall be the volume released from Burrendong Dam according to the rules set out in subclauses (16) and (22), except that there will be no debit for any water releases made when the water level in Burrendong Dam water storage is within the Flood Mitigation Zone (hereafter *the FMZ*),

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- (e) at the end of each water year:
 - (i) the total volume held in the two sub-allowances that is greater than 160,000 megalitres shall be forfeited, and
 - (ii) the remaining water held in the two sub-allowances shall be redistributed between the sub-allowances according to the proportions set out in subclause (12) (c) or as modified under subclause (13),
 - (f) evaporation reductions shall apply to the water carried over in the sub-allowances from the previous water year, based on the net evaporation on the extra surface area in Windamere Dam and Burrendong Dam water storages generated by the carried over water,
 - (g) the volume of water carried over in the sub-allowances from the previous water year, shall be reduced at the end of each month during which the water level in Burrendong Dam water storage was in the FMZ for all or part of that month,
 - (h) the total volume of reduction under subclause (12) (g) shall be the lesser of:
 - (i) the total remaining volume of water carried over in the environmental water sub-allowances from the previous water year, or
 - (ii) the result of the formula $TI \times EC / (TC + EC)$, where:
 - “TI” is the total volume of inflow to Burrendong Dam water storage while the water level in Burrendong Dam water storage is in the FMZ,
 - “TC” is the total volume remaining in carryover sub-accounts of regulated river (general security) access licences with extraction components that permit the taking of water downstream of the upper limit of Burrendong Dam water storage (hereafter *Macquarie regulated river (general security) access licences*), and
 - “EC” is the remaining volume of water carried over in the environmental water allowance from the previous water year,
 - (i) when all water held in carryover sub-accounts of Macquarie regulated river (general security) access licences has been withdrawn under clause 45 (3) (h), and an available water determination of 100% of share components or such lower percentage as results from clause 32 (2), has been made for all regulated river (general security) access licences under clause 38 (6), then the environmental water allowance shall be credited with sufficient volume to bring the total volume in the allowance to 160,000 megalitres, and
 - (j) whenever an available water determination of 100% of share components or such lower percentage as results from clause 32 (2), has been made for all regulated river (general security) access licences as a result of the water level in Burrendong Dam water storage re-entering the FMZ under clause 38 (7), the environmental water allowance shall be credited with sufficient volume to bring the total volume in the allowance to 160,000 megalitres.
- (13) At the commencement of each water year the Minister may, under section 42 (2) of the Act, alter the distribution specified in subclause (12) (c), providing that each sub-allowance receives at least two fifths of the total allowance and the sum of the proportions remains one.
- (14) Before taking action under subclause (13) the Minister should seek advice from the Environmental Flow Reference Group if established under subclause (23)

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regarding the need for and extent of changes under subclause (13), and such advice should consider:

- (a) the environmental outcomes achieved from the release of water from the environmental water allowance and from other flows in this water source in the previous 12 months,
 - (b) the current condition and likely condition over the coming 12 months of the Macquarie Marshes, and
 - (c) the desired environmental outcomes for the regulated Macquarie River and the Macquarie Marshes,
- (15) Pursuant to section 42 (2) of the Act and clause 67 of this Plan, the Minister may amend subclause (13) to the extent specified in clause 67,
- (16) Releases of sub-allowance 1 (translucent) water shall be made from Burrendong Dam according to the following:
- (a) water carried over from the previous water year shall be released before water that has been credited to sub-allowance 1 (translucent) in the current water year,
 - (b) releases shall only be made during the periods 1 June to 30 November (inclusive) and 15 March to 31 May (inclusive) each year,
 - (c) releases shall be made whenever the sum of storage inflows plus tributary inflows downstream of Burrendong Dam would be capable of providing a flow of at least 500 ML/day for 5 days or more in the Macquarie River immediately upstream of Marebone Weir, subject to the limitations in subclause (16) (d),
 - (d) the rate of release shall be the lesser of:
 - (i) the storage inflow, or
 - (ii) the rate of release necessary to achieve up to a maximum flow target of 4,000 ML/day in the Macquarie River immediately upstream of Marebone Weir,
 - (e) releases of sub-allowance 1 (translucent) water shall cease when the sum of storage inflows plus tributary inflows reduces to a level which would no longer result in a flow of at least the volume specified by subclause (16) (c), unless releases of sub-allowance 1 (translucent) water are being extended by release of sub-allowance 2 (active),
 - (f) releases of sub-allowance 1 (translucent) water shall cease when the allowance volume held in sub-allowance 1 (translucent) reaches zero, subject to the rules for use of sub-allowance 2 (active) water developed under subclause (22),
 - (g) releases of sub-allowance 1 (translucent) water may also cease if the health of the regulated sections of the Macquarie River (excluding its regulated effluents) or the Macquarie Marshes would not in the opinion of the Minister, be significantly improved by further releases of sub-allowance 1 (translucent) water,
 - (h) before ceasing releases of sub-allowance 1 (translucent) water, under subclause (16) (g) the Minister should consult with the Minister for the

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- Environment unless the action is in accordance with any advice provided under subclause (16) (i),
- (i) at the commencement of each water year the Minister should seek advice from the Environmental Flow Reference Group if established under subclause (23), regarding the factors or measurements which would indicate that the circumstances in subclause (16) (g) had occurred, and
 - (j) releases of sub-allowance 1 (translucent) water may be extended using releases of sub-allowance 2 (active) after consideration of advice provided under subclause (22) (k) (ii).
- (17) At the commencement of each water year the Minister may, under section 42 (2) of the Act, alter the dates specified in subclause (16) (b) but only within the extent of the periods specified in subclause (16) (b).
- (18) Before altering subclause (16) (b) in accordance with subclause (17) the Minister should seek advice from the Environmental Flow Reference Group if established under subclause (23), regarding the need for and extent of changes, and such advice should consider:
- (a) the outcomes achieved from the use of the environmental water allowance and environmental health water in the previous 12 months,
 - (b) the current condition and likely condition over the coming 12 months of the Macquarie Marshes, and
 - (c) the desired environmental outcomes for the regulated main stem of the Macquarie River and the Macquarie Marshes.
- (19) At the commencement of each water year the Minister may, under section 42 (2) of the Act alter the release trigger of 500 ML/day in subclause (16) (c) and the maximum flow target of 4,000 ML/day in subclause (16) (d).
- (20) Pursuant to subclause (19) the maximum flow target of 4,000 ML/day may be increased if:
- (a) changes to the flow constraints on the Warren floodplain or water management outlet works during the term of this Plan are such that community assets are not at risk from higher storage releases, or
 - (b) an assessment using the performance indicators specified in clause 12, demonstrates that the Macquarie River or the Macquarie Marshes would benefit from a higher maximum flow target to maintain its ecological condition.
- (21) Before altering subclause (16) (c) or subclause (16) (d) in accordance with subclause (19) the Minister should seek advice from the Environmental Flow Reference Group if established under subclause (23), regarding the need for and extent of changes, and such advice should consider:
- (a) the outcomes achieved from the use of the environmental water allowance and environmental health water in the previous 12 months,
 - (b) the current condition and likely condition over the coming 12 months of the Macquarie Marshes, and
 - (c) the desired environmental outcomes for the regulated main stem of the Macquarie River and the Macquarie Marshes,

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- (22) Releases of sub-allowance 2 (active) water are to be made from Burrendong Dam according to the following:
- (a) water carried over from the previous water year shall be released before water that has been credited to sub-allowance 2 (active) in the current water year,
 - (b) releases of sub-allowance 2 (active) water may not be made to meet ecological needs in the Macquarie River or the Macquarie Marshes if these needs will be met by releases under subclause (16), unless releases of sub-allowance 2 (active) water are to be made pursuant to subclauses 22 (i), 22 (g) and 22 (j),
 - (c) releases may be made at any time of the year to enhance opportunities for native fish recruitment and dispersal in the Macquarie River and Macquarie Marshes,
 - (d) releases may be made at any time of the year to ensure the successful completion of colonial water bird breeding, except when:
 - (i) the volume of sub-allowance 2 (active) water in storage and climate predictions over the breeding event period indicates that the event can not be sustained, or
 - (ii) all water bird colonies can not be sustained, then priority will be dependant on the species type, location of breeding site, number of pairs, vulnerability of the population and long-term ecosystem maintenance overrides individual species or present annual wetland requirements,
 - (e) releases may be made at any time of the year for the purpose of alleviating severe, unnaturally prolonged drought conditions in the Macquarie Marshes where habitat maintenance of semi-permanent wetlands as defined by River Red Gum Woodlands, water couch and common reed is seen as critical,
 - (f) releases may be made at any time of the year for the purpose of any other ecological objectives, identified pursuant to subclause 22 (g),
 - (g) before the commencement of each water year the Minister should identify any other ecological objects for the purpose of subclause (22) (f) and develop detailed rules to govern the releases of sub-allowance 2 (active) water to address these ecological objectives and the ecological objectives or contingent events specified in subclauses (22) (b), (22) (c), (22) (d) (ii) and 22 (e),
 - (h) the Minister should seek advice from the Environmental Flow Reference Group if established under subclause (23), at any time within the water year regarding the use of sub-allowance 2 (active) water for the purposes specified in subclauses (22) (c), (22) (d) (ii), (22) (e) and (22) (f),
 - (i) in the event that the detailed rules referred to in subclause (22) (g) have not been developed, sub-allowance 2 (active) water shall be released according to the rules applying to sub-allowance 1 (translucent) water once the volume in sub-allowance 1 is exhausted,
 - (j) the rules developed under subclause (22) (g) may permit sub-allowance 2 (active) water to be used to extend releases of sub-allowance 1 (translucent) water, and

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- (k) at the commencement of each water year the Minister should seek advice from the Environmental Flow Reference Group if established under subclause (22), on:
 - (i) the priority of ecological objectives and the rules that will govern the use of sub-allowance 2 (active) water during the coming water year, and
 - (ii) the circumstances under which releases of sub-allowance 1 (translucent) water may be extended using sub-allowance 2 (active) water when the volume in sub-allowance 1 (translucent) is nearing zero.
- (23) An Environmental Flow Reference Group should be established by the Minister under section 388 of the Act for the purpose of providing advice in accordance with subclauses (5), (14), (16) (i), (18), (21), (22) (h) and (22) (k) and clause 67 (6).
- (24) In providing advice in accordance with subclauses, (5), (14), (16) (i), (18), (21), (22) (h) and (22) (k) and clause 67 (6), the Environmental Flows Reference Group shall have regard to:
 - (a) the objectives of this Plan,
 - (b) the principles of adaptive management,
 - (c) restoration of river flow variability within the constraints of the regulated river system,
 - (d) maintenance, rehabilitation or restoration, where possible, of the links between the river and its floodplain, effluent creeks and wetlands,
 - (e) maintenance, rehabilitation or restoration, where possible, of in-channel and riparian habitats, and
 - (f) maintenance, rehabilitation or restoration, where possible, of river channel form and processes.
- (25) The Environmental Flows Reference Group should be established by 1 October 2004.
- (26) The Environmental Flow Reference Group should consist of one full member and one deputy member nominated by:
 - (a) Macquarie River Food and Fibre or its successor,
 - (b) Macquarie Marshes Environmental Landholders or its successor,
 - (c) the Macquarie Effluent Creeks Association or its successor,
 - (d) the Department or its successor,
 - (e) NSW Fisheries or its successor,
 - (f) NSW National Parks and Wildlife Service or its successor,
 - (g) Nature Conservation Council or its subsequent organisation with a background in ecology, and
 - (h) Cudgegong Valley Water Committee or its successor.
- (27) The Environmental Flows Reference Group may also consist of other members as appointed by the Minister.

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- (28) Members of the Environmental Flows Reference Group should be appointed for a period of 5 years.
- (29) Members of the Environmental Flows Reference Group should select the Chair.
- (30) A quorum of the Environmental Flows Reference Group should be two community representatives and representatives of the Department or its successor, and NSW National Parks and Wildlife Service or its successor.
- (31) The Environmental Flows Reference Group should report and communicate on its activities in accordance with procedures established by the Minister.
- (32) In the event the Environmental Flows Reference Group is able to reach consensus on its advice to the Minister, then the Minister should either:
 - (a) accept that advice and make the recommended management changes, or
 - (b) manage in accordance with subclauses (2), (3), (6), (7), (8), (12), (16) and (22), or
 - (c) alter or amend management in accordance with the rules in the relevant subclauses of clause 15.
- (33) In the event the Environmental Flows Reference Group is unable to reach consensus on its advice to the Minister, then the Minister should either:
 - (b) manage in accordance with subclauses (2), (3), (6), (7), (8), (12), (16) and (22), or
 - (c) alter or amend management in accordance with the rules in the relevant subclauses of clause 15.
- (34) Before taking action in accordance with subclauses (32) (c) or (33) (c) the Minister should consult with the Minister for the Environment.

16 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there will be a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

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Part 4 Basic landholder rights

17 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

18 Domestic and stock rights

Note. Water from this water source should not be consumed without prior treatment which is adequate to ensure its safety.

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights are estimated to be 1,200 megalitres per year (hereafter *ML/yr*).
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur, as a result of an increase in the number of landholdings fronting this water source or as a result of an increase in the exercise of domestic and stock rights on existing landholdings.

- (3) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising domestic and stock rights through a repeat of the worst period of low inflows to this water source, represented in flow information held by the Department.
- (4) To achieve subclause (3) sufficient volumes of water must be set aside from assured inflows into this water source and reserves held in Burrendong Dam and Windamere Dam water storages.

Note. The Minister may issue an order under section 328 of the Act to restrict the exercise of domestic and stock basic rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

19 Native title rights

Note. Water from this water source should not be consumed without prior treatment which is adequate to ensure its safety.

- (1) At the commencement of this Plan there are no holders of native title rights in this water source and therefore native title rights are 0 ML/yr.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note. Increase in native title rights may occur, as a result of the granting of native title rights under the Commonwealth *Native Titles Act 1993*.

- (3) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising native title rights through a repeat of the worst period of low inflows to this water source represented in flow information held by the Department.
- (4) To achieve subclause (3) sufficient volumes of water must be set aside from assured inflows into this water source and reserves held in Burrendong Dam and Windamere Dam water storages.

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Part 5 Bulk access regime

20 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 3 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 4 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 6 of this Plan.
- (3) The bulk access regime established under subclause (2):
 - (a) establishes rules according to which access licences are granted as provided for in Part 7 of this Plan,
 - (b) recognises and is consistent with the limits to the availability of water as provided for in Part 8 of this Plan,
 - (c) establishes rules according to which available water determinations are to be made as provided for in Part 8 of this Plan,
 - (d) recognises the effect of climatic variability on the availability of water as provided for in Part 8 of this Plan,
 - (e) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction of the availability of water as provided for in Part 8 of this Plan, and
 - (f) establishes rules according to which access licences are managed as provided for in Part 9 of this Plan.

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Part 6 Requirements for water under access licences

21 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The following clauses in this Part represent the total volumes specified in the share components of access licences in this water source. There is no commitment to make the volumes specified available. The actual volumes available at any time will depend on climate, access licence priority and the rules in this Plan.

22 Share component of domestic and stock access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of domestic and stock access licences authorised to extract water from this water source will total approximately 14,265 megalitres.

23 Share component of local water utility access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of local water utility access licences authorised to extract water from this water source will total approximately 22,681 megalitres.

24 Share component of regulated river (high security) access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (high security) access licences authorised to extract water from this water source will total approximately 19,419 megalitres.

25 Share component of regulated river (general security) access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (general security) access licences authorised to extract water from this water source will total approximately 632,428 megalitres.

26 Share component of regulated river (supplementary water) access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (supplementary water) access licences authorised to extract water from this water source will total 50,000 megalitres.

27 Changes to total share component

This Plan recognises that total requirements for water under access licences in each access licence category may change during the term of this Plan as a result of:

- (a) the granting, surrender, cancellation or non renewal of access licences, or
- (b) variations to local water utility access licences arising from section 66 of the Act.

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Part 7 Rules for granting access licences

28 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act.
- (2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than for access licences of the following kinds:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) domestic and stock (domestic only) access licences, or
 - (c) an access licence resulting from an application of a type listed in section 82 (1) of the Act.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstances relating to that access licence, and that the share component sought will be the minimum required to meet that purpose and circumstances.
- (5) Subclause (4) does not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.

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Part 8 Limit to the availability of water

Division 1 Long-term extraction limit

29 Limit to the availability of water

This Division is made in accordance with sections 20 (2) (a) of the Act.

30 Volume of the long-term extraction limit

- (1) This Plan establishes a long-term extraction limit for this water source which is the lesser of:
 - (a) the long-term average annual extraction from this water source that would occur with:
 - (i) the water storages, private water management infrastructure and cropping mix that existed in 1999/2000,
 - (ii) the share component existing at the commencement of this Plan,
 - (iii) the maximum crop area and the crop planting behaviour representative of baseline conditions used for assessment of Cap under Schedule F of the Murray Darling Basin Agreement,
 - (iv) the environmental water provisions specified in clauses 15 (2), 15 (3), 15 (6), 15 (7), 15 (8), 15 (12), 15 (16) and 15 (22) of this Plan, and
 - (v) the other water management rules applying at the commencement of this Plan, or
 - (b) the long-term average annual extraction from this water source that would occur under the baseline conditions used for assessment of Cap under Schedule F of the Murray Darling Basin Agreement.

Note. The baseline conditions used for assessment of Cap under Schedule F of the Murray Darling Basin Agreement means the level of water resource development at June 1994.

Note. An assessment of the long-term average annual extraction that would occur under the conditions specified in subclause (1) (a) has been made using the Macquarie IQQM computer model scenario run number 0_96ERF3.s6. This indicated a long-term average annual extraction volume of 391,900 megalitres.

Note. An assessment of the long-term average annual extraction that would result from the baseline conditions in subclause (1) (b) has been made using the Macquarie IQQM computer model Cap scenario run number 86934_87.s6. This indicated a long-term average annual extraction volume of 433,000 megalitres.

Note. The long-term extraction limit recognises the effect of climatic variability on the availability of water, in accordance with section 20 (2) (c) of the Act as historic climate and river flow information is used in its determination.
- (2) The values referred to in subclauses (1) (a) and (1) (b) shall be adjusted for any access licence dealing under section 71E of the Act.
- (3) For the purposes of establishing the long-term extraction limit and auditing compliance with it, the following shall be included:
 - (a) all water extractions by holders of all categories of access licences in accordance with the rules used for accounting of the Cap diversions for Schedule F of the Murray Darling Basin Agreement,
 - (b) domestic and stock rights and native title rights extractions,

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- (c) volumes of water delivered as adaptive environmental water,
 - (d) floodplain harvesting extractions determined to be taken for use in conjunction with extractions from this water source, and
 - (e) assignment of water allocations from the water allocation accounts of access licences in this water source to the water allocation accounts of access licences in other water sources.
- (4) For the purposes of establishing the long-term extraction limit and auditing compliance with it, the following shall not be included:
- (a) replenishment flows made in accordance with this Plan, and
 - (b) diversion of water pursuant to the supplementary environmental water rules under clause 15.
- (5) For the purposes of establishing the long-term extraction limit and auditing compliance with it, the assessed volume of extractions shall be reduced by the volume of water allocations being assigned from the water allocation accounts of access licences in other water sources to the water allocation accounts of access licences in this water source.

31 Assessment of the long-term extraction limit and current long-term average annual extraction

- (1) Assessment of the long-term extraction limit and the current long-term average annual extraction shall be carried out after the end of each water year, using the hydrologic computer model that, at the time, is approved by the Department for assessing long-term water extraction from this water source.
- (2) To assess the long term extraction limit, the model referred to in subclause (1) shall be set to represent as closely as possible the conditions referred to in clauses 30 (1) (a) and 30 (1) (b).
- (3) To assess the current long-term average annual extraction from this water source, the model referred to in subclause (1) shall be set to represent as closely as possible all water use development, supply system management and other factors affecting the quantity of long-term extraction from this water source, at the time of assessment.
- (4) Any advice provided by a Compliance Assessment Advisory Committee if established under clause 33 should be considered in relation to assessments under subclause (1).

32 Compliance with the long-term extraction limit

- (1) The long-term average annual extraction from this water source shall not be permitted to exceed the long-term extraction limit specified in clause 30 (1).
- (2) Pursuant to subclause (1), the maximum volume that may be made available to a supplementary water access licence, and if necessary to a regulated river (general security) access licence during any water year shall be reduced, if:
- (a) it has been assessed that the current long-term average annual water extraction from this water source exceeds the long-term extraction limit specified in clause 30 (1) by the lesser of 3%, or half the difference between the volume specified in clause 30 (1) (a) and the volume specified in clause 30 (1) (b), or

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- (b) if it has been assessed that the current long-term average annual extraction from this water source exceeds the volume specified in clause 30 (1) (b), or
 - (c) if assessments in accordance with clause 31 for 3 consecutive water years indicate that the long-term average annual extraction from this water source exceeds the long-term extraction limit.
- (3) The degree of reduction under subclause (2) shall be that assessed necessary to return long term average annual extraction from this water source to the long-term extraction limit.
 - (4) The assessment of the degree of reduction required under subclause (2) shall be made using the same computer model used to carry out assessments of extractions compared to the long-term extraction limit under clause 31.
 - (5) Any advice provided by a Compliance Assessment Advisory Committee if established under clause 33 should be considered in relation to assessments under subclause (4).
 - (6) Any reduction in access under clause 32 shall not be applied to the environmental water allowance for the Macquarie River, established in clause 15.
 - (7) The first reduction method used under subclause (2) shall be to reduce the maximum available water determination for supplementary water access licences made under clause 39 (2).
 - (8) Once no extractions by supplementary water access licenses are allowed as a result of subclause (7), then the limit to the sum of available water determinations made to regulated river (general security) access licences specified in clause 38 (4), is to be reduced.
 - (9) If the maximum total allocation provided by available water determinations in any water year has been reduced as a result of subclause (2) and a subsequent assessment under clause 31 indicates that current long term average annual extraction is below the long term extraction limit by more than 3%, then previous reductions under subclause (2) may be reversed to the degree that it is assessed necessary to return water use to the levels defined by the long term extraction limit.
 - (10) Any reversal of previous reductions under subclause (9) shall:
 - (a) first be applied to regulated river (general security) access licences, if action under subclause (8) has occurred, and
 - (b) not exceed the previous reductions made under subclause (2).
 - (11) The assessment of the degree to which any previous reductions may be reversed under subclause (9) shall be made using the same computer model used to carry out assessments of usage compared to the long term extraction limit under clause 31.
 - (12) Any advice provided by a Compliance Assessment Advisory Committee if established under clause 33 should be considered in relation to assessments under subclause (9).

33 Compliance Assessment Advisory Committee

- (1) The Minister should establish a Compliance Assessment Advisory Committee under section 388 of the Act for the purposes of providing advice regarding assessments under clauses 31 and 32.

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- (2) In providing its advice, the Compliance Assessment Advisory Committee should consider possible improvements to:
 - (a) assessment of extraction compared to the long-term extraction limit, under clause 31,
 - (b) the computer model referred to in clause 31,
 - (c) the data used in the computer model referred to in clause 31, and
 - (d) the effectiveness of any actions taken in accordance with clauses 32 (2) and 32 (9).
- (13) Membership of the Compliance Assessment Advisory Committee should be for a period of 5 years and should consist of the following:
 - (a) a person representing the Department, or its successor,
 - (b) a person representing the State Water arm of the Department, or its successor,
 - (c) a person representing NSW Agriculture, or its successor,
 - (d) no more than 3 persons representing the irrigation industry,
 - (e) a person representing local government,
 - (f) a person representing either the National Parks and Wildlife Service, Environmental Protection Authority or NSW Fisheries or their successors,
 - (g) a person representing nature conservation interests, and
 - (h) other members, as appointed by the Minister.

Division 2 Available water determinations

34 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) All available water determinations in this water source shall be expressed as a percentage of the share component of each access licence in a licence category.

35 Available water determinations for domestic and stock access licences

- (1) The water supply system shall be managed so that available water determinations for domestic and stock access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, represented in flow information held by the Department.
- (2) Sufficient volumes of water shall be set aside from assured inflows to this water source and reserves held in Windamere Dam and Burrendong Dam water storages or other water storages to provide for subclause (1).
- (3) The available water determination for domestic and stock access licences made for the commencement of each water year shall be 100% of share components, whenever possible.
- (4) The sum of available water determinations made for domestic and stock access licences in any water year shall not exceed 100% of share components.
- (5) This Plan recognises that the water requirement of domestic and stock access licences may increase during the term of this Plan in accordance with clause 28.

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- (6) The volumes of water set aside from assured inflows into this water source and reserves held in Windamere Dam and Burrendong Dam water storages or other water storages shall be adjusted as required over the course of this Plan, if necessary to do so to ensure subclause (1) is satisfied.

36 Available water determinations for local water utility access licences

- (1) The water supply system shall be managed so that available water determinations for local water utility access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, represented in flow information held by the Department.
- (2) Sufficient volumes of water shall be set aside from assured inflows into this water source and reserves held in Windamere Dam and Burrendong Dam water storages or other water storages to provide for subclause (1).
- (3) The available water determination for local water utility access licences made for the commencement of each water year shall be 100% of share components, whenever possible.
- (4) The sum of available water determinations made for local water utility access licences in any water year shall not exceed 100% of share components.
- (5) This Plan recognises that the water requirement of local water utility access licences may increase during the term of this Plan in accordance with clause 28 and section 66 of the Act.
- (6) The volumes of water set aside from assured inflows into this water source and reserves held in Windamere Dam and Burrendong Dam water storages or other water storages shall be adjusted as required over the course of this Plan if necessary to do so, to ensure subclause (1) is satisfied.

37 Available water determinations for regulated river (high security) access licences

- (1) The water supply system shall be managed so that available water determinations for regulated river (high security) access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, represented in flow information held by the Department.
- (2) Sufficient volumes of water shall be set aside from assured inflows into this water source and reserves held in Windamere Dam and Burrendong Dam water storages or other water storages to provide for subclause (1).
- (3) The available water determination for regulated river (high security) access licences made for the commencement of each water year shall be 100% of share components, whenever possible.
- (4) If the available water determination made under subclause (3) is less than 100% of share components, then further assessments of available water shall be carried out at least monthly and available water determinations made until the sum available water determinations for the water year is 100% of share components.
- (5) The sum of available water determinations for regulated river (high security) access licences in any water year shall not exceed 100% of share components.
- (6) Available water determinations made for regulated river (high security) access licences shall take into account:

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- (a) the environmental water provisions established by this Plan,
- (b) requirements for domestic and stock rights,
- (c) requirements for native title rights,
- (d) requirement for domestic and stock access licences,
- (e) requirements for local water utility access licences,
- (f) volumes remaining in water allocation accounts from previous available water determinations,
- (g) water losses associated with the holding and delivery of water to meet the requirements specified in subclauses (a) to (f),
- (h) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
- (i) any other relevant matters.

38 Available water determinations for regulated river (general security) access licences

- (1) An available water determination shall not be made for regulated river (general security) access licences in any water year until the sum of available water determinations for regulated river (high security) access licences for the water year is equivalent to 100% of share components.
- (2) An available water determination for regulated river (general security) access licences shall be made for the commencement of each water year if water can be provided to them.
- (3) If the available water determination resulting from subclause (2) is less than the percentage specified in subclause (4) assessments of available water shall be made at least monthly and further available water determinations made, if additional water can be provided.
- (4) The sum of available water determinations made for regulated river (general security) access licences in any water year shall not exceed 100% of share components, or such lower percentage as results from clause 32.
- (5) Subclause (4) shall not apply in water years when all water held in carryover sub-accounts of Macquarie regulated river (general security) access licences has been withdrawn under clause 45 (3).
- (6) When all water held in carryover sub-accounts of Macquarie regulated river (general security) access licences has been withdrawn under clause 45 (3), an available water determination of 100% of share components or such lower percentage as results from clause 32, shall be made for all regulated river (general security) access licences.
- (7) Following an available water determination of 100% under subclause (6), whenever the water level in Burrendong Dam water storage re-enters the FMZ in that water year, an available water determination of 100% of share components, or such lower percentage as results from clause 32 (2), shall be made for all regulated river (general security) access licences

Note. The result of subclauses (6) and (7) and the carryover and account rules in clause 45 is that all regulated river (general security) access licence available water determination sub-accounts (established under clause 41) will be re-credited to a volume equivalent to 100% of share components when all water held in Macquarie regulated river (general security)

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access licence carryover sub-accounts has been eliminated. Once this has occurred all available water determination sub-accounts will continue to be re-credited to 100% of share components whenever the water level in Burrendong Dam water storage re-enters the FMZ in that water year.

- (8) Available water determinations made for regulated river (general security) access licences shall take into account any relevant operational requirements identified in Part 12 of this Plan and:
- (a) the environmental water provisions established by this Plan,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) requirements for regulated river (high security) access licences,
 - (g) allocations remaining in water accounts from previous available water determinations,
 - (h) water losses associated with the holding and delivery of water to meet the requirements specified in subclauses (a) to (g),
 - (i) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
 - (j) any other relevant matters.

39 Available water determinations for supplementary water access licences

- (1) An available water determination shall be made at the commencement of each water year and shall define the percentage of regulated river (supplementary water) access licence share component that can be taken in that year.
- (2) The available water determination made under subclause (1) shall not exceed 100% of share components or such lower percentage as results from the operation of clause 32 (2).

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Part 9 Rules for managing access licences

Division 1 General

40 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 20 (2) (e), 21 (a), 21 (c) and 85 (1B) of the Act having regard to:

- (a) the environmental water rules established in Part 3 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 4 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 6 of this Plan.

Division 2 Water allocation account management

41 Water allocation accounts

- (1) In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.
- (2) The water allocation account for regulated river (general security) access licences established under subclause (1) shall consist of two sub-accounts, being:
 - (a) an available water determination sub-account (hereafter *AWD sub-account*), and
 - (b) a carryover sub-account.

42 Accrual of water allocations

- (1) Water allocations for domestic and stock access licences, local water utility access licences, regulated river (high security) access licences and supplementary water access licences shall be accrued into each access licence water allocation account in accordance with the available water determinations made.
- (2) Water allocations for regulated river (general security) access licences shall be accrued into each access licence AWD sub-account in accordance with the available water determinations made, subject to the volume held in the AWD sub-account not exceeding the share component volume.

43 Volume taken under access licences

Note. Section 341 of the Act makes it unlawful to take a volume of water under an access licence that exceeds the volume of water allocation which is credited to the access licence at the time of water extraction.

- (1) The water allocation taken under domestic and stock access licences, local water utility access licences, regulated river (high security) access licences and regulated river (general security) access licences shall be assessed as:
 - (a) the volume of water extracted by the approved water supply works nominated by the access licence, or
 - (b) the greater of:

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- (i) the volume of water extracted by the approved water supply works nominated by the access licence, or
 - (ii) the volume of water ordered for extraction by the approved water supply works nominated by the access licence,
- where the Minister has applied such a discretionary condition to the access licence.
- (2) The Minister should only apply a discretionary condition in relation to subclause (1) (b) where this has been provided for in a compliance management strategy, approved by the Minister.
- Note.** It is intended that the discretionary condition referred to above should only be applied where water orders have been exceeding the volume of water being taken under a licence and this cannot be explained by rainfall or other unavoidable factors.
- (3) The water allocation taken under regulated river (general security) access licences shall be debited from the carryover sub-account until the volume in that sub-account reaches zero, and then from the AWD sub-account.
- (4) The water allocation taken under supplementary water access licences will be the volume of water extracted, in accordance with announcements made and access licence conditions, by the approved water supply works nominated by the access licence.

44 Accounting of assigned allocations and return flows

- (1) Water allocations assigned from a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be debited from that water allocation account, and water allocations assigned to a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be credited to that water allocation account.
- (2) Water allocations assigned from a regulated river (general security) access licence carryover sub-account shall be credited to the receiving regulated river (general security) access licence carryover sub-account.
- (3) Water allocations assigned from a regulated river (general security) access licence AWD sub-account shall be credited to the receiving regulated river (general security) access licence AWD sub-account.
- (4) Water allocations may also be re-credited to access licence water allocation accounts under section 76 of the Act, in accordance with water return flow rules established under section 75 of the Act.

45 Carrying over of water allocation credits, water allocation sub-account limits and withdrawal of water allocations that have been carried over

- (1) Water allocation remaining in the water allocation accounts of domestic and stock access licences, local water utility access licences and regulated river (high security) access licences and supplementary water access licences cannot be carried over from one water year to the next.
- (2) The maximum volume that may be held in the AWD sub-account of regulated river (general security) access licences at any time shall be the share component volume.
- (3) The following rules shall apply to the carrying over of water allocations in water allocation accounts of regulated river (general security) access licences:
 - (a) the maximum volume that may be carried over in the water allocation account of regulated river (general security) access licences with extraction components that permit the taking of water upstream of the upper limit of

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Burrendong Dam water storage (hereafter *Cudgegong regulated river (general security) access licences*), from one water year to the next shall be the greater of:

- (i) 100% of the access licence share component, or
 - (ii) the volume specified in Schedule 3 for access licences arising from the Water Act licences listed on that Schedule, where no dealing has taken place which in the opinion of the Minister will result in all or part of the water extracted under the access licence being used on a landholding other than the landholding on which the water was being used at the commencement of this Plan, or
 - (iii) the volume specified in Schedule 3 for access licences arising from the Water Act licences listed on that Schedule minus the proportion of the share component of the access licence affected by a dealing which in the opinion of the Minister will result in all or part of the water extracted under the access licence being used on a landholding other than the landholding on which the water was being used at the commencement of this Plan,
- (b) the maximum volume that may be carried over in the water allocation account of Macquarie regulated river (general security) access licences, from one water year to the next shall be 100% of the access licence share component,
 - (c) water carried over from a water allocation account under subclause (3) shall be held in the carryover sub-account,
 - (d) evaporation reductions shall apply to water in the carryover sub-accounts of regulated river (general security) access licences based on the net evaporation on the extra surface area in Windamere Dam and Burrendong Dam water storages generated by the carried-over water,
 - (e) water allocations shall be withdrawn, under section 85 (1B) of the Act, from the carryover sub-accounts of Cudgegong regulated river (general security) access licences at the end of each month, when Windamere Dam water storage is spilling and the water level in Burrendong Dam water storage was in the FMZ for all or part of the month,
 - (f) the total volume of water allocation withdrawn under subclause (3) (e) shall be the lesser of:
 - (i) the total volume of water remaining in carryover sub-accounts of Cudgegong regulated river (general security) access licences, or
 - (ii) the total volume of water spilt from Windamere Dam water storage when the water level in Burrendong Dam water storage is in the FMZ,
 - (g) pursuant to subclause (3) (e) withdrawals from the individual carryover sub-accounts of each Cudgegong regulated river (general security) access licence shall be determined using the formula, $(TR / TC) \times IC$, where:
 - “TR” is the total volume of reduction calculated in subclause (3) (f),
 - “TC” is the total volume remaining in carryover sub-accounts of Cudgegong regulated river (general security) access licences, and
 - “IC” is the individual volume remaining in carryover sub-accounts of Cudgegong regulated river (general security) access licences,

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- (h) water allocations will be withdrawn, under section 85 (1B) of the Act, from the carryover sub-accounts of Macquarie regulated river (general security) access licences at the end of each month, when the water level in Burrendong Dam water storage is in the FMZ for all or part of that month,
- (i) the total volume of water allocation withdrawn under subclause (3) (h) shall be the lesser of:
- (i) the total volume of water remaining in carryover sub-accounts of Macquarie regulated river (general security) access licences, or
- (ii) the result of the formula $TI \times TC / (TC + EC)$, where:
- “TI” is the total volume of inflow to Burrendong Dam water storage when the water level in Burrendong Dam water storage is in the FMZ,
- “TC” is the total volume remaining in carryover sub-accounts of Macquarie regulated river (general security) access licences, and
- “EC” is the remaining volume of water carried over in the environmental water allowance from the previous water year, and
- (j) pursuant to subclause (3) (h) withdrawals from the individual carryover sub-accounts of each Macquarie regulated river (general security) access licence shall be determined using the formula, $(TR / TC) \times IC$, where:
- “TR” is the total volume of reduction calculated in subclause (3) (i),
- “TC” is the total volume remaining in carryover sub-accounts of Macquarie regulated river (general security) access licences, and
- “IC” is the individual volume remaining in carryover sub-accounts of Macquarie regulated river (general security) access licences.

Note. The result of subclause (3) and the available water determination rules in clause 38 is that all regulated river (general security) access licence AWD sub-accounts will be recredited to a volume equivalent to 100% of share components when all water held in Macquarie regulated river (general security) access licence carryover sub-accounts has been eliminated. Once this has occurred, all AWD sub-accounts will continue to be recredited to 100% of share components whenever the water level in Burrendong water storage re-enters the FMZ in that water year.

Division 3 Extraction conditions

46 General priority of extractions

Where extraction components of access licences do not specify the rate as a share of supply capability or a volume per unit of time, the following priority of extractions shall apply whenever supply capability is insufficient to satisfy all orders for water in any section of this water source:

- (a) water shall be supplied to domestic and stock access licences, local water utility access licences and regulated river (high security) access licences that have placed an order for water, then to regulated river (general security) access licences, and

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- (b) then any remaining supply capability shall be shared between regulated river (general security) access licences that have placed an order for water, in proportion to the share components specified on the access licences.

47 Numerical specification of extraction components

- (1) At any time during the term of this Plan, the Minister may, in accordance with the mandatory conditions on access licences, amend the extraction components of access licences in this water source, or in any section of this water source.
- (2) Action under subclause (1) should be undertaken as follows:
 - (a) the specified rate in the extraction component of each access licence should be a volume per unit of time or a share of supply capability,
 - (b) the specified rate in the extraction component of each domestic and stock, local water utility and regulated river (high security) access licence should be sufficient to satisfy the maximum daily water needs, and
 - (c) after satisfying subclause (2) (b), the remaining supply capability should be distributed among regulated river (general security) access licences in proportion to the share component of each access licence.
- (3) When action under subclause (1) is undertaken the Minister may also, in accordance with mandatory conditions on access licences, amend the extraction components of access licences in other sections of this water source to exclude extractions in sections of this water source affected by the action under subclause (1).

48 Extraction of water under supplementary water access licences

- (1) The taking of water under supplementary water access licences shall only be permitted in accordance with announcements made by the Minister.
- (2) The maximum volume that may be taken under supplementary water access licences during each period of time to which an announcement applies may be expressed as a percentage of each supplementary water access licence share component.
- (3) Taking of water under supplementary water access licences shall be managed, as far as possible, to evenly share access opportunity amongst all supplementary water access licences.
- (4) Taking of water under supplementary water access licences shall only be permitted when flows, and any releases from Burrendong Dam FMZ, are in excess of those required:
 - (a) under the environmental water provisions specified in Part 3 of this Plan,
 - (b) to supply domestic and stock rights and native title rights,
 - (c) to supply higher priority access licence requirements, and
 - (d) to provide replenishment flows as specified in clause 59.
- (5) Extraction of water by supplementary water access licences with extraction components that permit the taking of water downstream of the upper limit of Burrendong Dam water storage shall only be permitted when flows in the river will produce a flow which exceeds 5,000 ML/day at Warren above the requirements specified in subclause (4).

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- (6) Extraction of water by supplementary water access licences with extraction components that permit the taking of water upstream of Burrendong Dam water storage in the Cudgegong River shall only be permitted when Burrendong Dam is spilling, flows in the Macquarie River are consistent with subclause (4) and (5) and flows in the Cudgegong River are in excess of those required:
 - (a) under the environmental water provisions specified in Part 3 of this Plan,
 - (b) to supply domestic and stock rights and native title rights upstream of Burrendong Dam water storage, and
 - (c) to supply higher priority access licence requirements upstream of Burrendong Dam water storage.
- (7) At the 5 year review of this Plan, the Minister may, under section 42 (2) of the Act vary subclause (5) if it can be demonstrated that there has been no progress on improving the ability to provide regulated flows in excess of 5,000 ML/day at Warren.
- (8) Any variation to subclause (5) due to subclause (7) that increases the threshold at specified times shall also alter the threshold at other times so that the long-term access to flows by supplementary water access licences is not impacted as a result of that variation.
- (9) The primary factors for demonstrating progress as referred to in subclause (7) are the alteration of structures on the Warren floodplain to permit higher operational flows in that area, and an increased ability to release volumes larger than 8,200 ML/day from the valves of Burrendong Dam.

Note. Clause 48 (7) reviews the progress made in removing identified impediments that limit the management of regulated flow to enhance native fish breeding and dispersal opportunities. If the identified impediments have not been nullified, clause 48 (7) makes available the opportunity to alter the supplementary flow threshold to protect flows that promote the breeding success of the native fish.
- (10) The Minister should seek advice from the Environmental Flows Reference Group if established under clause 15 (23) regarding whether or not progress, as described in subclause (9) can be demonstrated, and if so, the appropriate changes to the flow threshold specified in subclause (5) and the time at which they will apply.
- (11) In any water year, the holder of a supplementary water access licence may not take more water than that specified in an available water determination made under clause 39.

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Part 10 Access licence dealing rules

49 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

Note. The access licence dealing principles referred to subclause (1) are contained in Appendix 5.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. Access licence dealings include changes of licence ownership, conversions of licence category, movement of share component from one access licence to another access licence, movement of water allocation from one access licence allocation account to another access licence allocation account and changes in the location of water supply that can take water available under the licence. These dealings must comply with the provisions of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

50 Rules relating to constraints within this water source

- (1) This clause relates to dealings under section 71B, 71D and 71J of the Act and to dealings in respect of water allocation assignments within this water source under section 71G of the Act..
- (2) Dealings shall be prohibited that would result in an increase to the total share components of access licences nominating water supply works, at that time, in either:
 - (a) Marra Creek,
 - (b) Crooked Creek,
 - (c) the lower Bogan River below the Gunningbar confluence, or
 - (d) the Prohibited Area of the Macquarie Marshes as defined in the Macquarie Marshes Water Management Plan 1996, published by the Department of Land and Water Conservation and the National Parks and Wildlife Service.
- (3) Dealings shall be prohibited that assign water to an allocation account of an access licence nominating water supply works in either:
 - (a) Marra Creek,
 - (b) Crooked Creek,
 - (c) the lower Bogan River below the Gunningbar confluence, or
 - (d) the Prohibited Area of the Macquarie Marshes as defined in the Macquarie Marshes Water Management Plan 1996, published by the Department of Land and Water Conservation and the National Parks and Wildlife Service.
- (4) Until extraction components for access licences in the section of this water source from Windamere Dam water storage to Burrendong Dam water storage have been amended under clause 47 any dealing that would result in the total share

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components of access licences nominating water supply works in that section exceeding 40,000 megalitres shall be prohibited.

- (5) Until extraction components for access licences in the Gunningbar Creek above Fairview Dam section of this water source have been amended under clause 47, any dealing that would result in the total share components of access licences nominating water supply works in that section exceeding 36,000 megalitres shall be prohibited.

Note. The 36,000 megalitre volume in subclause (5) includes licences that draw from the Albert Priest Channel as supply to that channel is via Gunningbar Creek.

- (6) Until extraction components for access licences in the Gunningbar Creek below Fairview Dam section of this water source have been amended under clause 47, any dealing that would result in the total share components of access licences nominating water supply works in that section exceeding 1,700 megalitres shall be prohibited.
- (7) Until extraction components for access licences in Duck Creek have been amended under clause 47, any dealing that would result in the total share components of access licences nominating water supply works in Duck Creek exceeding 5,000 megalitres shall be prohibited.
- (8) Until extraction components for access licences in Bulgeraga Creek have been amended under clause 47, any dealing that would result in the total share components of access licences nominating water supply works in Bulgeraga Creek exceeding 33,000 megalitres shall be prohibited.
- (9) Any dealing that would result in an increase in the total share component of regulated river (high security) access licence nominating water supply works upstream of Burrendong Dam water storage shall be prohibited if it is assessed by the Minister that the assignment would significantly impact on the reliability of supply to regulated river (general security) access licences in that section of this water source.
- (10) Assignment of water allocations from a supplementary water access licence water allocation account to an access licence of any other access licence category shall be prohibited.
- (11) Assignment of water allocations to a supplementary water access licence water allocation account from an access licence of any other access licence category shall be prohibited.

51 Rules for change of water source

- (1) This clause relates to dealings under sections 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been effected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.

- (2) Access licences in other water sources outside of this water source may be issued following cancellation of access licences in this water source, only if:
- (a) the access licence dealing rules in the receiving water source permit such a dealing, and
 - (b) a conversion factor, established by the Minister and published in an Order made under section 71L of the Act that protects environmental water,

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domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, has been applied.

- (3) Access licences in this water source may be issued following cancellation of access licences in other water sources, only if:
 - (a) the access licence dealing rules in the other water source permit such a dealing, and
 - (b) a conversion factor, established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, has been applied.

52 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category shall be prohibited except as provided for under this clause.
- (3) On application of the access licence holder, the Minister may cancel a regulated river (general security) access licence, and issue a regulated river (high security) access licence, subject to:
 - (a) the application of a conversion factor established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, and

Note. At the commencement of this Plan a separate conversion factor will be applied to each 10,000 megalitres of regulated river (general security) access licence that converts to regulated river (high security) access licence.

- (b) the volume of water in the regulated river (general security) access licence water allocation account being equal to or greater than its share component volume.

Note. The volume of water in the regulated river (general security) access licence water allocation account which is in excess of the share component volume of the new regulated river (high security) access licence will not be credited to the new regulated river (high security) access licence water allocation account.

- (4) On application of the access licence holder, the Minister may cancel a regulated river (high security) access licence, and issue a regulated river (general security) access licence, subject to:
 - (a) the application of a conversion factor equal to one divided by the conversion factor established in subclause (3), and
 - (b) the total volume of regulated river (general security) access licence share components not increasing above the volume of regulated river (general security) access licence share components at the time of commencement of Part 2 of Chapter 3 of the Act.

Note. This subclause would allow conversion of a regulated river (high security) access licence to a regulated river (general security) access licence only if there had been a corresponding or larger volume of regulated river (general security) access licence share component converted to regulated river (high security) access licence.

53 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.

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- (2) Access licences equivalents in other States may not be transferred into this water source.
- (3) Access licences in this water source may not be transferred into another State.

54 Rules for water allocation assignment between water sources

- (1) This clause relates to dealings under section 71G of the Act in relation to water allocation assignments between water sources.
- (2) Water allocations from the water allocation account of an access licence in this water source may not be assigned to the water allocation account of an access licence in any other water source.
- (3) Water allocation from the water allocation account of an access licence in any other water source shall not be assigned to the water allocation account of an access licence in this water source.

55 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Water allocation equivalents from other States shall not be assigned to the water allocation accounts of access licences in this water source.
- (3) Water allocations from the water allocation accounts of access licences in this water source shall not be assigned to water allocation equivalents in other States.

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Part 11 Mandatory conditions

56 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
Note. The Minister may impose discretionary conditions at any time on an access licence in accordance with section 66 (1) (b) of the Act.
- (2) All access licences in this water source shall have mandatory conditions to give effect to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence including whether extraction is permitted upstream or downstream of Burrendong Dam water storage,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to the water allocation account management rules established in Part 9 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence may only occur if the resulting debit to the access licence account will not exceed the volume of water allocation remaining in the access licence account,
 - (f) the requirement that water may only be taken by water supply works nominated on the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.
- (3) All access licences shall have a mandatory condition that facilitates the provisions of clause 47 of this Plan.
- (4) All domestic and stock access licences, local water utility access licences, regulated river (high security) access licences and regulated river (general security) shall have mandatory conditions that only allow the taking of water if it has been ordered in accordance with procedures established by the Minister.
- (5) All domestic and stock access licences, except domestic and stock (domestic only) access licences, shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption or stock watering as defined in section 52 of the Act.
- (6) All domestic and stock (domestic only) access licences shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption as defined in section 52 of the Act.
- (7) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility, or for other such purpose provided for under the Act.

57 Mandatory conditions on water supply works approvals

All approvals for water supply works in this water source shall have mandatory conditions to give effect to the following:

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- (a) flow measurement devices shall be installed and maintained on all works used for extraction of water under an access licence and shall be of a type, and shall be maintained in a manner, which is acceptable to the Minister,
- (b) water extraction, property water management infrastructure and cropping details shall be provided on request, in the form and in accordance with procedures established by the Minister, and
- (c) the taking of water may only occur in accordance with the conditions applying to the access licence from whose water allocation account the taking of water will be debited.

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Part 12 System operation rules

58 System operation rules

This Part is made in accordance with section 21 (e) of the Act.

59 Replenishment flows

- (1) The following replenishment flows shall be made when required and when water is available from uncontrolled flows:
 - (a) up to 10,000 ML/yr to the Gum Cowal/Terrigal system,
 - (b) up 4,000 ML/yr to Crooked Creek below “Mumblebone”,
 - (c) up to 1,000 ML/yr to the Bogan River, from Nyngan to the Gunningbar Creek confluence,
 - (d) up to 1,000 ML/yr to Beleringar Creek, downstream of Albert Priest Canal,
 - (e) up to 1,500 ML/yr to Reddenville Break, and
 - (f) up to 5,000 ML/yr to Beleringar Creek.

Note. The replenishment requirements may vary considerably from year to year due to the seasonal conditions. The volumes in subclause (1) are what is necessary to replenish the entire river length in dry antecedent conditions.

- (2) The following replenishment flows may be made available when required:
 - (a) up to 15,000 ML/yr to Marra Creek, from its offtake, downstream to its junction with the Barwon River, and
 - (b) up to 15,000 ML/yr to the lower Bogan River, downstream of its junction with Gunningbar Creek to its junction with the Barwon River.
- (3) Sufficient volumes of water shall be set aside from assured inflows to this water source and reserves held in Windamere Dam and Burrendong Dam water storages to provide for subclause (2).
- (4) A replenishment flow of up to 50 ML/day shall be provided below the Macquarie Marshes, from “Miltara” to the Barwon River, at least twice each water year.

Note. The Northern By-pass Channel may be used to provide the flows under subclause (4), supplementing natural flows through the marshes to maintain the target flow.

Note. In most years, flows through the Macquarie Marshes will provide a continuous water supply at “Miltara”.

60 Water delivery and channel capacity constraints

Where necessary for determining extraction rights, managing water releases or providing water under access licences, the maximum water delivery or operating channel capacity shall be determined and specified in accordance with procedures established by the Minister, taking into account:

- (a) inundation of private land or interference with access,
- (b) the effects of inundation on the floodplain and associated wetlands,
- (c) the transmission losses expected to occur,
- (d) capacities of water management structures controlled by the Department, and

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- (d) the SWMOP targets.

61 Rates of change to storage releases

Rules regarding rates of change in releases from storages should be specified in accordance with procedures established by the Minister, and take into account:

- (a) relevant environmental considerations,
- (b) damage to river banks, and
- (c) public safety.

62 Bulk transfer rules between storages

- (1) High volume transfer releases shall be provided from Windamere Dam in sufficient time to prevent the storage volume of Burrendong Dam becoming insufficient to supply downstream basic landholder rights, access licence water allocations, the environmental water allowance for the Macquarie River and to meet any water losses associated with the delivery of that water.
- (2) During the first year of this Plan the Minister shall develop rules for determining the pattern and volume of releases under subclause (1).
- (3) Rules under subclause (2) shall consider the following:
 - (a) determination of volumes to be transferred,
 - (b) seasonality of flows,
 - (c) total duration of events,
 - (d) maximum discharge rates and their duration,
 - (e) rates of rise and fall in flow heights,
 - (f) access and agronomic requirements of land holders,
 - (g) ecological and geomorphological benefits,
 - (h) likely effects on native species and their habitat, particularly platypus and threatened aquatic species, and
 - (i) any other matters that may impact on the riverine environment or community.
- (4) Prior to finalising the rules under subclause (2), advice should be sought from appropriate representatives from the local community along the Cudgegong River below Windamere Dam, and such advice should be in regard to the factors specified in subclause (3).
- (5) Release dates and rates under subclause (1) shall be publicly notified.

63 Dam operation during floods and spills

- (1) The operation of Windamere Dam and Burrendong Dam during times of flood shall be undertaken in a manner that maintains the safety of dam infrastructure.
- (2) Providing it is consistent with subclause (1), the operation of Windamere Dam and Burrendong Dam should:
 - (a) leave the storage at full supply level at the completion of the flood event, subject to airspace requirements,

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- (b) ensure the general rate of increase of outflow does not exceed the rate of increase of inflow during floods, and
- (c) minimise downstream flood damage.

64 Airspace operation rules

- (1) Airspace operation of Burrendong Dam shall be undertaken in accordance with the following rules:

- (a) when not in flood operation, releases from Burrendong Dam FMZ can be made to ensure beneficial flooding for the regulated Macquarie River, the Macquarie Marshes, Marebone floodplain and effluent creeks, and the sharing and distribution of FMZ releases should be to:
 - (i) the Macquarie River and Macquarie Marshes when flows at Warren are less than 4,000 ML/day,
 - (ii) the Macquarie River and Macquarie Marshes, and Marebone floodplain, then Crooked, Gunningbar and Duck Creeks when flows at Warren are between 4,000 and 12,000 ML/day, and
 - (iii) the Macquarie River and Macquarie Marshes, and Warren floodplain, then Crooked, Gunningbar, Duck, Ewenmar and Beleringar Creeks when flows at Warren are greater than 12,000 ML/day,
- (b) the FMZ operation shall where possible, place emphasis on making controlled releases during the flood event so that the storage does not increase.

Note. This attempts to balance the benefits of providing airspace in Burrendong Dam to mitigate large inflow events with the damages of controlled releases that can extend the duration of flooding on the Warren floodplains.

- (c) releases from the FMZ will vary according to the storage level, rate of inflow and the need to maintain airspace to capture likely future storage inflows, and therefore the storage shall be divided into 3 bays,
- (d) each bay shall have different maximum rates of releases, and these releases which are above water orders, shall be equal to the inflow up to the maximum combined release, plus downstream tributary flow, and these releases shall be in accordance with the following:
 - (i) bay 1 – Burrendong Dam water storage between 100% and 120%, and releases to a maximum of 5,000 ML/day at Warren, which equates to approximately 5.5 metres at Warren town,
 - (ii) bay 2 – Burrendong Dam water storage between 120% and 130%, and releases to a maximum of 12,000 ML/day at Gin Gin, which equates to approximately 6.5 metres at Warren town, and
 - (iii) bay 3 – Burrendong Dam water storage between 130% and 142%, and releases to a maximum of 18,000 ML/day at Gin Gin, which equates to the minor flood level of 7.5 metres at Warren town,
- (e) release rates lower or higher than those indicated in subclause (1) (d) for each FMZ bay may be made if:
 - (i) the release rate specified in subclause (1) (d) will cause prolonged inundation of the floodplain and result in economic losses to agriculture,

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- (ii) the release rates specified in subclause (1) (d) will restrict landholder access to their properties for extended periods, or
 - (iii) the environment and community would benefit from lower or higher rates of release, and
- (f) releases from the FMZ can be used to provide access to water under regulated river (high security) access licences, regulated river (general security) access licences and supplementary water access licences, subject to clause 48.

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Part 13 Monitoring and reporting

65 Monitoring

The monitoring of the performance indicators specified in clause 12 shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with the water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved. It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51(5) of the Act, the Implementation Program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program are included in the annual report for the Department of Land and Water Conservation.

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Part 14 Amendment of this Plan

66 Changes to this water source

The Minister, under section 42 (2) of the Act and by notice published in the Gazette, may add a river or section of river to this water source or remove a river or section of river from this water source providing that:

- (a) any river or section of river that is added has been declared to be a regulated river by an order published in the Gazette, and
- (b) the Minister is satisfied that there will be no impact on environmental water, or on the available water to any access licences in this water source.

67 Changes to supplementary environmental water rules

- (1) The supplementary environmental water rules in this Plan can be amended in accordance with the following clauses:
 - (a) clause 15 (4) in respect to supplementary environmental water releases,
 - (b) clause 15 (13) in respect to the distribution of water between sub-allowance 1 and 2 of the environmental water allowance,
 - (c) clause 15 (17) in respect to the dates specified for release of sub-allowance 1 of the environmental water allowance, or
 - (d) clause 15 (19) in respect to the release triggers and maximum flow targets for release of sub-allowance 1 of the environmental water allowance.
- (2) The Minister may also under section 42 (2) of the Act and by Order published in the Gazette, amend clause 15 (13) prior to the commencement of the sixth year of this Plan and following completion of a review of the minimum sharing proportions for the two sub-allowances of the environmental water allowance, against the environmental objectives of this Plan and those identified in subclause (3).
- (3) The review under subclause (2) should consider and make recommendations on changes to clause 15 (13), regarding:
 - (a) the different minimum proportion, between 0% and 100%, that each sub-allowance must receive, or
 - (b) a maximum proportion, between 0% and 100%, that each sub-allowance must receive.
- (4) In undertaking the review under subclause (2) the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries and NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted in assessing environmental outcomes from the release of water under clause 15 of this Plan,
 - (ii) the environmental benefits of releases from sub-allowance 1 (translucent) made since the commencement of this Plan,
 - (iii) the environmental benefits of releases from sub-allowance 2 (active) made since the commencement of this Plan,

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- (iv) implications for the environmental benefits delivered during the first 5 years of this Plan, resulting from proposed changes to clause 15 (13), and
 - (v) implications for long-term average annual extractions and the long-term average volume of water released from the environmental water allowance, resulting from proposed changes to clause 15 (13).
- (5) The review under subclause (2) is to be undertaken and completed within the fifth year of this Plan.
- (6) Before making an Order under subclause (2) the Minister should seek the advice of the Environmental Flow Reference Group, if established under clause 15 (23), on any changes proposed in the review under subclause (2).
- (7) In providing advice to the Minister under subclause (6) the Environmental Flow Reference Group should take into consideration the environmental benefits provided by the use of the environmental water allowance since the commencement of this Plan.
- (8) Before making an Order under subclause (2), the Minister should:
 - (a) be satisfied that the amendment to clause 15 (13) will:
 - (i) result in an improvement in the environmental benefits of this Plan, and
 - (ii) not result in a change in the long-term average volume of water released from the environmental water allowance, and
 - (b) consult with the Minister for the Environment to the making of the Order.

68 Other amendment of this Plan

This Plan can be amended in accordance with clause 48 (7) of this Plan in respect to the minimum flow requirements for extraction of water under supplementary water access licences.

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

airspace is a volume in a water storage, which is kept empty for the purpose of mitigating potential floods.

assured inflows are the volumes of water which historic hydrologic information indicates are the minimum which can be expected to flow into the water source.

available water in relation to a water management area or water source, is the water that is available in that area or water source in accordance with an available water determination that is in force in respect of that area or water source.

available water determination is a written Order by the Minister as to the availability of water for the various categories of access licence in relation to a specified water management area or water source.

the Cap is as defined in Schedule F of the Murray Darling Basin Agreement.

conversion factor refers to the adjustment factor that may be applied to the size of share components when they are part of a dealing under 71B or 71E of the Act.

Department is the Department of Land and Water Conservation or its successor.

environmental contingency allowance is a volume of water held in storage from which releases are made for particular environmental purposes or in response to particular environmental circumstances.

extraction component is the extraction component of an access licence as defined in 56(1) of the Act.

floodplain harvesting is the collection or capture of water flowing across floodplains.

long-term average annual extraction is the average of annual water extractions from the water source over the period for which an assessment is carried out.

Minister is the Minister for Land and Water Conservation. The Minister may delegate functions under section 389 of the Act.

Murray Darling Basin Agreement is the agreement between the Commonwealth of Australia and the states of New South Wales, Victoria and South Australia as referred to in the *Murray Darling Basin Act, 1992*, for the purpose of promoting and co-ordinating effective planning and management for the equitable, efficient and sustainable use of the water, land and other environmental resources of the Murray-Darling Basin.

private water management infrastructure includes pumps, on-farm dams and all other private infrastructure which affect the volume of water taken by access licences.

replenishment flows are flows provided to refill pools and water holes in effluent river systems downstream of the water source and provide water for household and town use and stock.

reserves are volumes of water put aside in a water storage to allow the supply of future water requirements.

share component is the share component of an access licence as defined in 56(1) of the Act or, for the purposes of this Plan, any right to take water under the Water Act 1912 that gives rise to share component of an access licence under the Water Management Act 2000 (as amended).

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supply capability is defined as the rate at which water that can be supplied to a section of a water source after satisfying the environmental water provisions and the requirements for water to satisfy basic land holder rights.

translucent release is the release from a water storage of some portion of inflow to the water storage coincident with the occurrence of that inflow.

uncontrolled flow is flow, in excess of that needed to meet the environmental provisions of this Plan, basic landholder rights and water orders placed by regulated river (general security) access licences and higher priority access licences in a water source.

water storage means a state owned dam, weir or other structure, which is used to regulate and manage river flows in this water source and the water body impounded by this structure.

water supply system includes the water storages and all other factors influencing water supply that are under the control of the Minister.

water use development includes all privately owned water management structures, and all aspects of farm, industry, town or private household development which affect the volumes of water taken from the water source, and the management practices that are applied in relation to them.

water year is defined as a 12 month period from 1 July to 30 June.

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Schedule 2 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL – contributes to target in full

HIGH - while not fully contributing to target, there is a good level of contribution

PARTIAL - goes some way to meeting the target

LOW - only small degree of contribution to the target

Relevant target	Level of contribution	Comments
Target 1a Extractions in Murray-Darling Basin's regulated rivers limited to the level of the long term average annual extraction below the Murray-Darling Basin Ministerial Council (MDBMC) Cap which results from the long term impact of the environmental water rules	FULL	This Plan clearly sets out the basis for the long-term extraction limit in Part 8.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon.	HIGH	Rules set out in Part 8.
Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes.	HIGH	<p>The environmental flow regimes significantly improve inflows into the Marshes compared to Cap.</p> <p>4 fish species (Trout cod, Silver perch, Purple spotted gudgeon, Olive perchlet) occur in the Macquarie River system have been listed as threatened. This Plan should assist in the protection/recovery of these species.</p> <p>16 wetland and riparian dependent birds listed as threatened occur in the Macquarie system. The National Parks and Wildlife Service has assessed the impact of this Plan and concluded that this Plan should improve the quality of most of their habitats.</p> <p>Little is known about the ecology of the effluent creeks but this Plan has marginally improved medium to high flows into these creeks.</p> <p>This Plan makes environmental provisions for the Cudgegong River.</p>
Target 4a Wherever the frequency of "end of system" daily flows would be less than 60 percent of the predevelopment level without environmental water rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent of the predevelopment frequency.	FULL	<p>This Plan meets the target as follows:</p> <ul style="list-style-type: none"> 50th percentile flows are improved by more than 10% (ie increased from 36% of predevelopment under CAP to 47% under this Plan). 30th percentile flows are improved by more than 10% (ie from 34% of predevelopment under CAP to 55% under this Plan). 10th percentile flows are 87% of predevelopment under this Plan.

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Relevant target	Level of contribution	Comments
Target 4b Frequency of "end of system" daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile.	FULL	This Plan maintains the predevelopment 95 th percentile flow frequency for the Macquarie Marshes inflows.
Target 4c The channel capacity of all lower river and effluent creek systems used for the delivery of regulated water determined. Subject to reasonable socio-economic impacts, limits on daily supply volumes established for effluent systems such that they do not exceed 80 percent of the channel capacity for more than 10 percent of days in each month of each year. Where daily supply volumes are currently substantially less than channel capacity, alternative limits established to reduce the impact of unseasonal flows arising from future access licence dealings.	PARTIAL	This Plan provides for the determination of maximum operating channel capacities in accordance with this SWMOP target. This Plan also provides for the distribution of numerical extraction rights that could be used to facilitate management to desired capacity targets.
Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components.	FULL	Access for existing regulated supply licences and supplementary water access licences is clearly specified and tradeable.
Target 6 For surface water sources, a pathway for reducing the share components to 200 percent of the long term average annual extraction limit to be established not later than the end of the term of the SWMOP	FULL	Total entitlements do not exceed 200% of the long-term extraction limit.
Target 9a Flow thresholds for declaration of supplementary water access, which take into account environmental needs, clearly specified.	PARTIAL	This Plan specifies thresholds for access in the Macquarie River but allows small volumes of supplementary access in the Cudgegong based only on the status of Burrendong Dam and the Macquarie River.
Target 9b Annual limits on supplementary water extractions, consistent with the long term average annual extraction limits, established in all regulated river water sources.	FULL	This Plan sets the maximum annual extraction for supplementary water access licences at the full entitlement of 50,000 megalitres.
Target 9c Rules for sharing between supplementary water access licence holders made explicit.	PARTIAL	This Plan does not clearly specify any sharing rules, however it does provide for "even sharing" of access between supplementary water access licences.
Target 9d Supplementary access licence dealings made possible in regulated river water sources, subject to extraction limits and environmental assessment and Aboriginal spiritual and cultural constraints.	FULL	Trading of supplementary water access licences is permitted.
Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use.	FULL	Obligations are set out in Part 5 of this Plan.
Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of	PARTIAL	This Plan does not address Aboriginal cultural or traditional requirements and has not identified any sites of particular

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Relevant target	Level of contribution	Comments
management prepared, and measures put in place to protect and improve them		importance. The significant improvement in environmental flows achieved under this Plan should contribute to protecting or improving Aboriginal values.
Target 16a All share components of access licences tradeable	FULL	All entitlements (including supplementary water access licences) will be tradeable under this Plan.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water.	FULL	Access licence dealings between water sources are in line with Government policy.
Target 16d Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery.	FULL	This Plan does not impose reduction factors.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	FULL	This Plan establishes a number of zones and sets out access licence dealing restrictions based on either ecological factors or to protect the security of supply to existing users.
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries	PARTIAL	This Plan includes a general set of water quality objectives. It is not explicit about the water quality priorities and possible targets, (relevant environmental values, water quality parameters etc) and does not indicate whether improvement or maintenance of existing water quality is the expected from water sharing rules.

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Schedule 3 Cudgegong regulated river (general security) access licence carryover volumes for the purpose of clause 45 (3) (a)

Water Act Licence number	Area developed at the commencement of this Plan (hectares)	Carryover volume (megalitres)
80SA010585	470.7	7061
80SA010582	527	7905
SL095112	101.6	1524
SL095604	140	2100
SL095477	98	1470
SL095474	8	120
SL095671	39.5	593
SA010562	428	6416
SL095343	40	600
SL095663	5	75
SL095586	4.5	68
SL095276	56	840
SL095739	62.2	933
SL095581	101.4	1521
SA010580	79.3	1190
SL095053	33	495
SL050028	32.5	488
SL095449	21	315
SL039504	53	795
SL039799	122	1830
SL095833	20	300
SL095351	190	2850
SL095880	27.7	416
SL095747	12.1	182
SL051987	230	3450
SL095265	70	1050
SL095720	440	6600
SA010581	53	795
SL029394	10.5	158
SL095682	40	600
TOTAL	3516	52,740

Note. The carryover volume calculated in the table above is the result of the area developed at the commencement of this Plan, multiplied by 15 megalitres.

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Appendix 1 Rivers and lakes in the Macquarie and Cudgegong Regulated River Water Source

At the commencement of this Plan the Macquarie and Cudgegong Regulated Rivers Water Source includes the following:

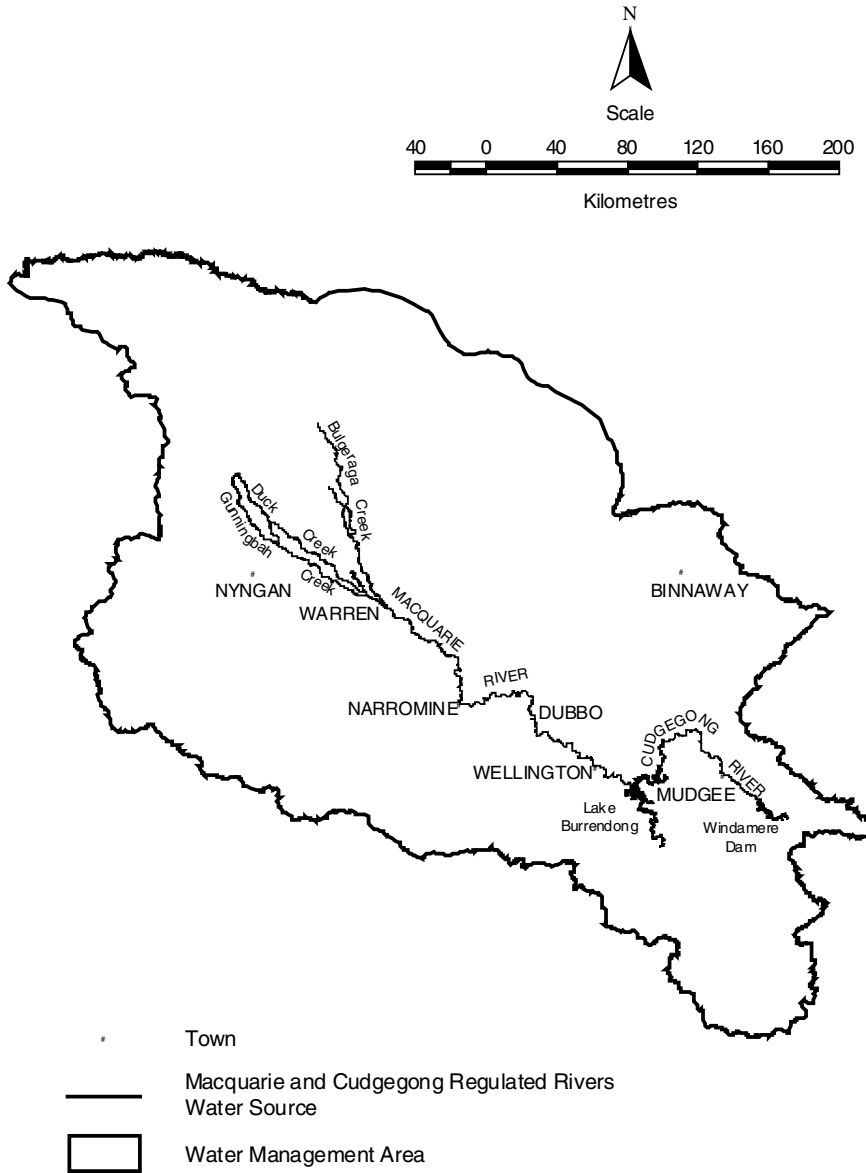
- (i) Macquarie River, from the upper limit of Burrendong Dam water storage, downstream to the Monkeygar Creek offtake,
- (ii) Bena Billa Creek,
- (iii) Bulgeraga Creek, from its confluence with Marebone Break within portion 6, Parish of Marebone, County of Gregory, downstream to the Gum Cowal offtake within portion 13, Parish of Duffity, County of Gregory,
- (iv) Bulgeraga Creek, from the Gum Cowal offtake within portion 13, Parish of Duffity, County of Gregory, downstream to its confluence with the Macquarie River,
- (v) Crooked Creek, from its offtake from Gunningbar Creek within portion 239, Parish of Warren, County of Oxley, downstream to the north-west boundary of portion 93, Parish of Mumblebone, County of Gregory,
- (vi) Cudgegong River, from the upper limit of Windamere Dam water storage downstream to its confluence with the upper limit of Burrendong Dam water storage,
- (vii) Cumboogle Creek, from its junction with Macquarie River to a point 90 metres upstream,
- (viii) Duck Creek,
- (ix) Gunningbar Creek from the downstream end of the Gunningbar Creek cutting downstream to Bogan River,
- (x) Marebone Break, from its offtake from the Macquarie River in the road reserve adjacent to the eastern boundary of portion 12, parish of Marebone, County of Gregory downstream to its confluence with Bulgeraga Creek, in portion 6, Parish of Marebone, County of Gregory,
- (xi) Mebul Creek, from its junction with the Cudgegong River to a point 25 metres upstream, and
- (xii) Ruins Creek, from its junction with the Cudgegong River to a point 20 metres upstream.

Note. The following rivers receive domestic and stock replenishment flows from this water source, when supplies are available, but do not themselves form part of this water source:

- (a) Gum Cowal / Terrigal system,
- (b) Crooked Creek below "Mumblebone",
- (c) Bogan River from Nyngan to the Gunningbar Creek confluence,
- (d) Bogan River from its junction with Gunningbar Creek to its junction with the Barwon River,
- (e) Marra Creek from its offtake downstream to its junction with the Barwon River,
- (f) Beleringar Creek downstream of Albert Priest Canal,
- (g) Reddenville Break,
- (h) Beleringar Creek, and
- (i) Macquarie River below "Miltata".

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Appendix 2 Central West Water Management Area



Appendix 3 State floodplain harvesting principles

Section 1 Definition and categories of floodplain harvesting

- (1) Floodplain harvesting is the collection, extraction or impoundment of water flowing across floodplains. The floodplain flows can originate from local runoff that has not yet entered the main channel of a river, or from water that has overflowed from the main channel of a river during a flood. For the purposes of this policy the floodplain is defined as extending to the 1 in 100 year flood line.
- (2) Floodplain harvesting can generally be put into one of three categories:
 - (a) diversion or capture of floodplain flows using purpose built structures or extraction works to divert water into storages, supply channels or fields or to retain flows,
 - (b) capture of floodplain flows originating from outside of irrigated areas using works built for purposes other than floodplain harvesting. Examples are:
 - (i) levees and supply works such as off river storages constructed in billabongs or depressions that fill from floodplain flows, and
 - (ii) below ground level water channels from which the water is pumped into on farm storages, and
 - (c) opportunistic diversions from floodplains, depressions or wetlands using temporary pumps or other means.

Note. Capture of rainfall or runoff from farm irrigation fields, via tailwater systems or other means, is not floodplain harvesting.

Section 2 Floodplain harvesting management issues

- (1) The harvesting of water from floodplains reduces the amount of water reaching or returning to rivers. This decreases the amount of water available to meet downstream river health, wetland and floodplain needs and the water supply entitlements of other users.
- (2) Floodplain harvesting can seriously affect the connectivity between the local floodplain, wetlands and the river, through the loss of flow volume and redirection of water flows.
- (3) The *Water Act 1912* provided powers to license floodplain harvesting. However this was never applied as there was generally no requirement to restrict total overall water extractions or off-allocation diversions. Harvested floodplain water has been treated as a freely available bonus to a farmer's licensed entitlement.
- (4) This situation has now changed. The Murray-Darling Basin cap applies to all water diverted from inland NSW catchments and rivers. Licensed and off-allocation access has been subject to increasing restrictions. Embargoes on water licences are also in place on many areas on the coast.
- (5) Floodplain harvesting works and water extractions also clearly fall into those activities that the *Water Management Act 2000* requires to be only undertaken by way of a licence. The Act also requires such licensing to consider the ecological functioning of floodplains.

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- (6) Floodplain harvesting can no longer be left outside of the State's water management and compliance system or as a source of increase in further water extractions. Given this, it is the Government's intention that floodplain harvesting works and taking of water from floodplains be licensed and managed. It will take a number of years to complete the process. However, the water sharing plans must signal the basic principles that will govern the process.

Section 3 Management of floodplain harvesting

- (1) Floodplain harvesting will not be a component of individual water sharing plans being produced for the regulated and unregulated rivers. During flood times water originating in one river system may flow across floodplains and along "flood runners" into adjacent river systems. It is therefore often not possible to assign an area of floodplain to a particular river.
- (2) Management of floodplain harvesting will occur on a state-wide basis, according to the six principles set out in section 4.
- (3) There are many thousands of existing floodplain works which will require licensing and this will be done over the next couple of years. The licensing process will include proper environmental impact assessments.
- (4) A separate category of licence will be established.

Section 4 Floodplain harvesting principles

- (1) Principle 1 is that all existing floodplain harvesting works and floodplain harvesting extractions will be licensed.
- (2) Principle 2 is that licensing will focus initially on controlling the structures, but with movement towards specifying volume limits and flow related access conditions, including metering of pumps

Note. While all surface and groundwater licences now (or will shortly) specify volume entitlements or annual limits to water, it is not possible to do this for floodplain harvesting licences at this stage. This is because the pattern of use is highly episodic and site and infrastructure specific, and current data on structures and use is minimal.

The Department of Land and Water Conservation will licence existing structures and specify monitoring of use (including metering of pumps) as a licence condition where possible. This may not be possible initially in cases where a tailwater system is also picking up floodplain water as they are difficult to separate, or where overland flow is being captured by a billabong for which we do not have any information on its capacity. Options for application of volumetric conditions will be developed and implemented where appropriate within the first five years of the initial water sharing plans.

- (3) Principle 3 is that no new works or expanded floodplain harvesting activities in the Murray-Darling Basin that will result in the diversion of additional water will be authorised.

Note. All new floodplain harvesting works are required by law to be licensed. However, as any new works would result in a growth in diversion, which would threaten river health and/or the water entitlements of others, such works would have to be offset by a reduction in other forms of water diversion.

- (4) Principle 4 is that floodplain diversions associated with works in place in the Murray-Darling Basin prior to the end of the 1994 irrigation season will be considered as within the NSW cap.

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Note. Because cap is based on the use of water with development as it was in 1994, NSW considers that the water use that would result from use of the floodplain infrastructure in place in 1994, is part of the cap in each system.

- (5) Principle 5 is that once licensing is completed, an assessment of long-term use resulting from authorised structures against that from structures which existed in 1994 will be carried out and appropriate steps taken to keep harvesting to cap levels.

Note. It is likely that there has been some growth in floodplain harvesting works and extractions since 1994. However, it is expected that the licensing process will result in some modification of existing works. This may be adequate to offset any post 1994 development. If not, restrictions on the use of the licensed works will have to be applied to return diversions to cap levels. Such restrictions could include restrictions on pumping times or a requirement to modify the work to allow a proportion of flows to be bypassed. By preventing the construction or enlargement of new works, the opportunity for any further growth in floodplain harvesting diversions will be minimised.

- (6) Principle 6 is that floodplain harvesting rights will not be tradeable.

Note. Trading of floodplain harvesting rights will not be permitted because the frequency and volume of use is site and infrastructure specific, and volume management will take some time to implement.

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Appendix 4 Performance indicators

Performance indicators for the Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source			
Performance indicator	Related objective	Assessed by	Commentary
(a) Change in low flows.	11 (a)	<ul style="list-style-type: none"> Number of days per water year where flow is below natural 95th and 80th percentiles. Average and maximum number of days per water year of continuous periods of flow which is below natural 95th and 80th percentiles. Measurement at end of system and specified key sampling sites. 	<ul style="list-style-type: none"> River Flow Objectives (RFOs) 1 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every objective is relevant to every river in NSW. Analysis would need to incorporate reference to seasonal indicators. Long-term modelling will reflect the influence of climate on flows. Appropriate data relating to flow distribution, such as summer/winter cropping balance, agronomical practices, on farm storage development, management and operation of environmental releases etc. Baseline audit should be the modelled water sharing plan scenario (rather than natural flows).
(b) Change in moderate to high flows.	11 (a)	<ul style="list-style-type: none"> Number of days per water year where flow is above natural 30th, 15th and 5th percentiles. Average and maximum number of days per water year of continuous periods of flow which is above natural 30th, 15th and 5th percentiles. Measurement at end of system and other key sampling sites in the water source. 	<ul style="list-style-type: none"> RFO 3.
(c) Change in water quality in this water source.	11 (a)	<ul style="list-style-type: none"> Assessment and statistical analysis of key water quality parameters, and relationship to flow. 	<ul style="list-style-type: none"> Plan rules will contribute to a long-term change in water quality by affecting flow regimes and flow management to address issues such as algal management. There are many non-water sharing plan related factors that affect water quality (eg land-based activities and thermal pollution).
(d) Change in ecological condition of this water source and dependent ecosystems.	11 (a)	<ul style="list-style-type: none"> Monitoring of ecological response to changed flow regimes, by integrated monitoring of environmental flows (IMEF). Each water source will have specific hypotheses from the set developed under the IMEF model. 	<ul style="list-style-type: none"> The Integrated Monitoring of Environmental Flows program tests a number of hypotheses to indicate how elements of river ecology respond to different aspects of the flow regime, including environmental flow regimes, irrigation flows, and floods and wetland connectivity.

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Performance indicators for the Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source			
Performance indicator	Related objective	Assessed by	Commentary
		<ul style="list-style-type: none"> Other relevant studies as may be undertaken in specific water sources. 	
(e) Change in economic benefits derived from water extraction and use.	11 (b) 11 (c)	<ul style="list-style-type: none"> Change in regional gross margins versus annual total extractions based on year 1 benchmarks (as represented in IQQM). Movement of water to higher value crops as measured by increases in area and/or water taken by these enterprises versus lower value uses. Change in unit price of water transferred. Annual total volume of access licence transferred (ML) in each water year. 	<ul style="list-style-type: none"> There are many factors affecting economic status of a region, for example commodity prices and other sources of water (eg groundwater). The performance indicator is intended to isolate as much as possible the effects of water availability and price on the gross margin returns at a regional level. Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan's provisions.
(f) Extent to which domestic and stock rights requirements have been met.		<ul style="list-style-type: none"> Basic rights allowances made according to plan provisions/implementation program requirements. Flows adequate to meet basic rights requirements (taking into consideration allowances for delivery). 	<ul style="list-style-type: none"> Basic rights usage figures in this water sharing plan are estimated volumes (not actual use). Basic rights represents a very small proportion of water extraction in regulated systems.
(g) Extent to which local water utility and major utility requirements (where major utilities are involved in urban water provision) have been met.		<ul style="list-style-type: none"> Percentage of years that reserves were adequate to satisfy urban water requirements. 	
(h) Extent to which native title rights have been met.		<ul style="list-style-type: none"> Native title rights allowances made according to plan provisions and implementation program requirements. 	
(i) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	11 (c) 11 (d)	<ul style="list-style-type: none"> Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of 5 years there should be relevant information collected for each water source, as a minimum requirement.

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Appendix 5 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

groundwater source means a water source specified in a groundwater management plan.

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hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or
 - (b) the total volume of water allocations in water allocation accounts, or
 - (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.
- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

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9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
 - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or
 - (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or

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- (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
 - (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing

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such mandatory conditions as are required by the relevant management plan for the new category.

- (12) For conversion of category from regulated river (general security) to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.

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- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.

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- (2) Dealings under section 71D are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:

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- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
 - (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
 - (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
 - (a) if either of the access licences is suspended under section 78 of the Act, or

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- (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
- (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically

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connected to the water source in which to which the access licence to be issued or revoked relates.

- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or
 - (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and

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- (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
 - (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.

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- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Water Sharing Plan for the Gwydir Regulated River Water Source 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

 Water Sharing Plan for the Gwydir Regulated River Water Source 2003

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Water Sharing Plan for the Gwydir Regulated River Water Source 2003

Part 1 Introduction

1 Name of plan

This Plan is the *Water Sharing Plan for the Gwydir Regulated River Water Source 2002* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000 as amended* (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2003 and ceases 10 years after that date.

4 Water source and waters to which this Plan applies

- (1) The water source in respect of which this Plan is made is that between the banks of all rivers, from the upper limits of Copeton Dam water storage downstream to the junction of the Gwydir River and its effluent rivers with the Barwon River, which, at the date of commencement of the Plan, have been declared by the Minister to be regulated rivers.

Note. A regulated river is a river that has been declared by the Minister, by order published in the New South Wales Government Gazette, to be a regulated river.

Note. The regulated rivers referred to in subclause (1) are listed in Appendix 1.

- (2) The water source shall be known as the Gwydir Regulated River Water Source (hereafter **this water source**).
- (3) The rivers included in this water source may be varied under section 42 (2) of the Act as set out in Part 14 of this Plan.
- (4) This water source is within the Gwydir and Border Rivers Water Management Areas constituted by the Ministerial order published in the NSW Government Gazette (hereafter **the Gazette**) on 23 November 2001.

Note. The Gwydir River system is shown on the map in Appendix 2.

- (5) This Plan applies to all waters contained within this water source but does not apply to waters contained within aquifer water sources underlying these water sources or to water on land adjacent to this water source.

Note. Management of floodplain harvesting is not a component of this water sharing plan. Management of floodplain harvesting will occur according to a number of state-wide management principles, attached in Appendix 3.

5 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan, unless redefined in Schedule 1, and the effect of these terms may be explained in Notes.

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- (2) Additional terms are defined in Schedule 1.
- (3) Notes in this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

6 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from the date of commencement to those matters that are being administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible the rules embodied in this Plan will apply to matters administered under the *Water Act 1912* in the interim.

7 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act this Plan is consistent with the State Water Management Outcomes Plan published in the Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 2 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to these targets.

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Part 2 Vision, objectives, strategies and performance indicators

8 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

9 Vision

The vision for this Plan is to have a sustainable, healthy river system that provides reliable water through flow management for the community, environment, agriculture and industry.

10 Objectives

The objectives of this Plan are to:

- (a) protect, maintain and enhance the environmental values of the Gwydir Regulated River Water Source,
- (b) manage the Gwydir Regulated River Water Source to ensure equitable sharing of water between all uses,
- (c) protect the Gwydir Regulated River Water Source by ensuring that extraction minimises any adverse impacts,
- (d) improve water quality in the Gwydir Regulated River Water Source,
- (e) provide opportunities for ecologically sustainable market based trading of surface water entitlements in the Gwydir Regulated River Water Source,
- (f) manage the Gwydir Regulated River Water Source to preserve and enhance basic water rights,
- (g) ensure extraction from the Gwydir Regulated River Water Source is managed properly within the Murray Darling Basin Ministerial Council Cap, and
- (h) manage the Gwydir Regulated River Water Source to preserve and enhance cultural and heritage values.

Note. Although there are no specific strategies directly related objective (h) in this Plan, the environmental water provisions in the Plan make a contribution towards the preservation of cultural and heritage values.

11 Strategies

The strategies of this Plan are to:

- (a) establish environmental water provisions (Part 3 of this Plan),
- (b) identify water requirements for basic landholder rights (Part 4 of this Plan),
- (c) identify water requirements for access licences (Part 6 of this Plan),
- (d) establish rules for granting of access licences (Part 7 of this Plan),
- (e) establish provisions that place limits on the availability of water (Part 8 of this Plan),
- (f) establish rules for making available water determinations (Part 8 of this Plan),

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- (g) establish rules for the operation of water accounts (Part 9 of this Plan),
- (h) establish provisions specifying circumstances under which water may be extracted (Part 9 of this Plan), and
- (i) establish access licence dealing rules (Part 10 of this Plan).

12 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in ecological condition of this water source and dependent ecosystems,
- (b) change in low flow regime,
- (c) change in moderate to high flow regime,
- (d) change in water quality in this water source,
- (e) extent to which domestic and stock rights requirements have been met,
- (f) extent to which local water utility requirements have been met,
- (g) change in economic benefits derived from water extraction and use,
- (h) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (i) extent to which native title rights have been met.

Note. Appendix 4 details the objectives to which these performance indicators relate and the methods for assessing indicators.

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Part 3 Environmental water provisions

13 Environmental water provisions

This Part is made in accordance with sections 5 (3), 8 (1), 8 (2) and 20 (1) (a) of the Act.

14 Environmental health water

This Plan establishes the following environmental health water rules:

- (a) water volume in excess of the long-term extraction limit established in clause 30 of this Plan may not be taken from this water source and used for any purpose,
- (b) water availability is to be managed as specified in clause 32 of this Plan to ensure water volume in excess of the long-term extraction limit is not being taken,

Note. By limiting long term average annual extractions to an estimated 388,000 megalitres per year this Plan ensures that approximately 56% of the long-term average annual flow in this water source (estimated to be 875,400 megalitres per year) will be preserved and will contribute to the maintenance of basic ecosystem health.

- (c) the minimum flow passed through to the Gwydir wetlands is to be the lesser of:
 - (i) the sum of flows in the Horton River at Rider, Myall Creek at Molroy, and Halls Creek at Bingara, plus any water spill or pre-release for flood mitigation purposes from Copeton Dam water storage, and
 - (ii) 500 megalitres per day (hereafter *ML/day*),

Note. At the time of commencement of this Plan, wetland inflow assessment is based on flows in the Gwydir River at Yarraman minus estimated delivery losses and water use between there and the wetland.

- (d) the passing of the flows referred to in subclause (c) to the Gwydir wetlands may be suspended or temporarily curtailed if, in the opinion of the Minister, this would be environmental beneficial to the Gwydir Wetlands,
- (e) advice from the ECA Operations Advisory Committee should be sought before action under subclause (d) is taken, and
- (f) any flows not passed to the Gwydir Wetlands as a result of action under subclause (d) must be used elsewhere to support fundamental ecosystem health and may not be taken or used for other purposes.

15 Supplementary environmental water

This Plan establishes the following supplementary environmental water rules:

- (a) an environmental contingency allowance (hereafter *ECA*) is to be set aside in Copeton Dam water storage,
- (b) an account of the water credited to and released from the ECA is to be kept,
- (c) whenever an available water determination for regulated river (general security) access licences is made, the ECA account shall be credited with a volume equal to the lesser of:

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- (i) 45,000 megalitres multiplied by the percentage of share component specified in that available water determination, and
- (ii) 90,000 megalitres minus the volume currently in the account,
- (d) water in the ECA account may be released for any of the following purposes:
 - (i) to support a colonially nesting native bird breeding event that has been initiated in the Gwydir wetlands following natural flood inundation,
 - (ii) to provide additional inundation in the Gingham and Lower Gwydir Wetlands during or following periods of extended dry climatic conditions,
 - (iii) to provide inundation of higher level benches in the river reaches between Copeton Dam and the Gwydir River at Gravesend,
 - (iv) to provide short-term inundation of the wetlands to promote germination of Hyacinth as part of a weed management strategy involving a wetting and drying cycle,
 - (v) to provide flows for environmental purposes in effluent streams,
 - (vi) to support native fish populations and habitat,
 - (vii) to support invertebrates and other aquatic species,
 - (viii) to support threatened species, and
 - (ix) to maintain aquatic ecosystem health.
- (e) an ECA Release Program shall be prepared for each water year and shall establish guidelines for the release of water from the ECA account for the purposes listed in subclause (d),
- (f) the guidelines established in each ECA Release Program should be aimed at maximising the environmental benefit of releases and full utilisation of the available ECA volume,
- (g) an ECA Operations Advisory Committee should be established for the purpose of providing advice regarding:
 - (i) the annual ECA Release Program under subclause (e), and
 - (ii) the making of releases during the course of a water year.
- (h) the ECA Operations Advisory Committee should consist of:
 - (i) a member from the Department or its subsequent organisation,
 - (ii) a member from the National Parks and Wildlife Service or its subsequent organisation,
 - (iii) a member from NSW Fisheries or its subsequent organisation,
 - (iv) a member from the Gwydir Valley Irrigators Association or its subsequent organisation,
 - (v) a member representing the interests of landholders in the Gingham Watercourse,
 - (vi) a member representing the interest of landholders in the Lower Gwydir Watercourse, and

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- (vii) a member representing non-government environmental interests,
- (i) the ECA Operations Advisory Committee should be chaired by the Department's representative, and
- (j) until such time as the ECA Release Program has been developed, releases of water from the ECA account shall be made for the purposes listed in subclause (d) and should be aimed at maximising the environmental benefit of releases and full utilisation of the available ECA volume.

16 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there shall be a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

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Part 4 Basic landholder rights

17 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

18 Domestic and stock rights

Note. Water from this water source should not be consumed without prior treatment which is adequate to ensure its safety.

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights are estimated to be 6,000 megalitres per year (hereafter *ML/yr*).
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting this water source or by an increase in the exercise of domestic and stock rights on landholdings.

- (3) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising domestic and stock rights through a repeat of the worst period of low inflows into this water source, as represented in flow information held by the Department.
- (4) To achieve subclause (3) sufficient volumes of water must be set aside from assured inflows into the plan area and reserves held in Copeton Dam water storage.

Note. The Minister may issue an order under section 328 of the Act to restrict the exercise of domestic and stock basic rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

19 Native title rights

Note. Water from this water source should not be consumed without prior treatment which is adequate to ensure its safety.

- (1) At the commencement of this Plan there are no holders of native title rights in this water source and therefore native title rights are 0 ML/year.
- (2) This Plan recognises that native title rights may increase during the term of this Plan.

Note. Increase in native title rights may occur as a result of the granting of native title rights under the *Commonwealth Native Titles Act 1993*.

- (3) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising native title rights through a repeat of the worst period of low inflows to these water sources, as represented in flow information held by the Department.
- (4) To achieve subclause (3) sufficient volumes of water must be set aside from assured inflows into this water source and in reserves held in Copeton Dam water storage.

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Part 5 Bulk access regime

20 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 3 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 4 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 6 of this Plan.
- (3) The bulk access regime established under subclause (2):
 - (a) establishes rules according to which access licences are granted as provided for in Part 7 of this Plan,
 - (b) recognises and is consistent with the limits to the availability of water as provided for in Part 8 of this Plan,
 - (c) establishes rules according to which available water determinations are to be made as provided for in Part 8 of this Plan,
 - (d) recognises the effect of climatic variability on the availability of water as provided for in Part 8 of this Plan,
 - (e) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction of the availability of water as provided for in Part 8 of this Plan, and
 - (f) establishes rules according to which access licences are managed as provided for in Part 9 of this Plan.

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Part 6 Requirements for water under access licences

21 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The following clauses in this Part represent the total volumes specified in the share components of access licences in this water source. There is no commitment to make these volumes available. The actual volumes available at any time will depend on climate, access licence priority and the rules in this Plan.

22 Share component of domestic and stock access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of domestic and stock access licences authorised to extract water from this water source will total 4,245 megalitres.

23 Share component of local water utility access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of local water utility access licences authorised to extract water from this water source will total 3,836 megalitres.

24 Share component of regulated river (high security) access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (high security) access licences authorised to extract water from this water source will total 19,293 megalitres.

25 Share component of regulated river (general security) access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (general security) access licences authorised to extract water from this water source will total 509,500 megalitres.

26 Share component of supplementary water access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of supplementary water access licences authorised to access water from this water source will total 170,000 megalitres.

27 Changes to total share component

This Plan recognises that total requirements for extraction under access licences in each access licence category may change during the term of this Plan as a result of:

- (a) the granting, surrender, cancellation or non renewal of access licences, or
- (b) variations to local water utility access licences arising from section 66 of the Act.

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Part 7 Rules for granting access licences

28 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act.
- (2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than for access licences of the following kinds:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 yearly intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) domestic and stock (domestic only) access licences, or
 - (c) an access licence resulting from an application of a type listed in section 82 (1) of the Act.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstances relating to that access licence, and that the share component sought will be the minimum required to meet that purpose and circumstances.
- (5) Subclause (4) does not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.

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Part 8 Limits to the availability of water

Division 1 Long-term extraction limit

29 Limit to the availability of water

This Division is made in accordance with section 20 (2) of the Act.

30 Volume of the long-term extraction limit

- (1) This Plan establishes a long-term extraction limit for this water source being the lesser of:

- (a) the long-term average annual extraction from this water source that would occur with the water storages and water use development that existed in 1999/2000, the share components existing at the commencement of this Plan and application of the water management rules defined in this Plan, or
- (b) the long-term average annual extraction from this water source that would occur under Cap baseline conditions.

Note. An assessment of the long-term average annual extraction that would occur under the conditions specified in subclause (1) (a) has been made using the Gwydir IQQM computer model with system file 9002wsp.8.sqIQQMv6.61.005. This indicates a long-term average annual extraction volume of 388,000 megalitres.

Note. An assessment of the long-term average annual extractions resulting from the baseline conditions in subclause (1) (b) has been made using the Gwydir IQQM computer model with system file dv93465a.s6_IQQMv6.61.001. This indicates a long-term average annual extraction volume of 415,000 megalitres.

Note. The long-term extraction limit recognises the effect of climatic variability on the availability of water, in accordance with section 20 (2) (c) of the Act as historic climate and river flow information is used in its determination.

- (2) The values referred to in subclauses (1) (a) and (1) (b) shall be adjusted for any access licence dealing under section 71E of the Act.
- (3) For the purposes of establishing the long-term extraction limit and auditing compliance with it, the following shall be included:
 - (a) all water extractions by all categories of access licences in accordance with the rules used for accounting of Cap diversions for Schedule F of the Murray Darling Basin Agreement,
 - (b) domestic and stock and native title rights extractions,
 - (c) volumes of water delivered as adaptive environmental water,
 - (d) floodplain harvesting extractions determined to be taken for use in conjunction with extractions authorised from this water source, and
 - (e) water allocations assigned from access licence water allocation accounts in this water source to access licence water allocation accounts in another water source.
- (4) For the purposes of establishing the long-term extraction limit and auditing compliance with it:
 - (a) the assessed volume of extractions shall be reduced by the volume of water allocations being assigned from the water allocation accounts of access licences in any other water source to the water allocation accounts of access licences in this water source, and

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- (b) the following shall not be included:
 - (i) replenishment flows made in accordance with this Plan, or
 - (ii) diversion of water pursuant to the environmental health water rules and the supplementary environmental water rules in Part 3 of this Plan.

31 Assessment of the long-term extraction limit and current long-term average annual extraction

- (1) Assessment of the long-term extraction limit and the current long-term average annual extraction shall be carried out after the end of each water year, using the hydrologic computer model that, at the time, is approved by the Department for assessing long-term water use from this water source.
- (2) To assess the long-term extraction limit, the model referred to in subclause (1) shall be set to represent as closely as possible the conditions referred to in clauses 30 (1) (a) and 30 (1) (b).
- (3) To assess current long-term average annual extraction from this water source the model referred to in clause 31 (1) shall be set to represent as closely as possible all water use development, supply system management and other factors affecting the quantity of long-term average annual extraction from this water source at the time of compliance assessment.

32 Compliance with the long-term extraction limit

- (1) The long-term average annual extraction from this water source may not be permitted to exceed the long-term extraction limit specified in clause 30.
- (2) Pursuant to subclause (1):
 - (a) if it has been assessed that the current long-term average annual extraction from this water source, exceeds:
 - (i) the volume specified in clause 30 (1) (a) by 3% or more,
 - (ii) the volume specified in clause 30 (1) (a) by more than half the difference between the volume specified in clause 30 (1) (a) and the volume specified in clause 30 (1) (b), or
 - (iii) the volume specified in clause 30 (1) (b), or
 - (b) if the assessments for 3 consecutive water years indicate that the current long-term average annual extraction from this water source exceeds the long term extraction limit,
 - (c) then the maximum available water determination made for supplementary water access licences under clause 39 shall be reduced, and
 - (d) once the maximum available water determination for supplementary water access licences has reduced to zero, the maximum volumes that may be taken or assigned from a regulated river (general security) access licences under clause 33 shall be reduced.
- (3) The degree of reduction under subclause (2) shall be that assessed necessary to return long-term average annual extractions to the long-term extraction limit.
- (4) Reductions in the percentages specified in clauses 33 (a) and 33 (b), pursuant to subclause (3), are to be of the same proportion.

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Note. Subclause (4) means that if the percentage specified in clause 33 (a) is reduced from say 125% to 100% (ie by one fifth), then the percentage specified in clause 33 (b) is to be reduced from 300% to 240% (ie one fifth).

- (5) If action has been taken under subclause (2), and a subsequent assessment under clause 31 indicates that the current long-term average annual extractions is below the long-term extraction limit by more than 3%, then previous reductions under subclause (2) may be reversed to the degree that it is assessed necessary to return the long-term average annual extractions to the long term extraction limit.
- (6) Any reversal of previous reductions under subclause (5):
 - (a) shall not exceed previous reductions made under subclause (2), and
 - (b) shall first reverse any previous reductions relating to regulated river (general security) access licences.
- (7) The assessment of the degree of any reduction required under subclause (2) or degree of any reversal under subclause (5), shall be made using the same computer model used to carry out assessments under clause 31.

33 Limit to the volumes that may be taken under or assigned from regulated river (general security) access licences

The maximum volume that may be taken under or assigned from a regulated river (general security) access licence in this water source:

- (a) during any water year, shall be 125% of the share component of the access licence, or such lower percentage that may result from clause 32, plus the volume of water allocations assigned to the access licence from another access licence during that water year, and
- (b) during any 3 consecutive water years, shall be 300% of the share component of the access licence, or such lower percentage that may result from clause 32, plus the volume of water allocations assigned to the access licence from another access licence during the 3 water years.

Division 2 Available water determinations

34 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) All available water determinations in this water source shall be expressed as a percentage of the share component of each access licence in a licence category.

35 Available water determinations for domestic and stock access licences

- (1) The water supply system shall be managed so that available water determinations for domestic and stock access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, as represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into this water source and in reserves held in Copeton Dam water storage to provide for subclause (1).
- (3) The available water determination for domestic and stock access licences made for the commencement of each water year shall be 100% of share components whenever possible.

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- (4) The sum of available water determinations made for domestic and stock access licences in any water year shall not exceed 100% of share components.
- (5) This Plan recognises that the water requirement of domestic and stock access licences may increase during the term of this Plan in accordance with clause 28.
- (6) The volumes of water set aside from assured inflows into this water source and in reserves held in Copeton Dam water storage shall be adjusted as required over the course of this Plan, if necessary to do so to ensure subclause (1) is satisfied.

36 Available water determinations for local water utility access licences

- (1) The water supply system shall be managed so that available water determinations for local water utility access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, as represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into this water source and in reserves held in Copeton Dam water storage to provide for subclause (1).
- (3) The available water determination for local water utility access licences made for the commencement of each water year shall be 100% of share components whenever possible.
- (4) The sum of available water determinations made for local water utility access licences in any water year shall not exceed 100% of share components.
- (5) This Plan recognises that the water requirement of local water utility access licences may increase during the term of this Plan in accordance with clause 28 and section 66 of the Act.
- (6) The volumes of water set aside from assured inflows into this water source and in reserves held in Copeton Dam water storage shall be adjusted as required over the course of this Plan, if necessary to do so to ensure subclause (1) is satisfied.

37 Available water determinations for regulated river (high security) access licences

- (1) The water supply system shall be managed so that available water determinations for regulated river (high security) access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, as represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into this water source and in reserves held in Copeton Dam water storage to provide for subclause (1).
- (3) The available water determination for regulated river (high security) access licences made for the commencement of each water year shall be 100% of share components whenever possible.
- (4) If the available water determination made under subclause (3) is less than 100% of share components, then further assessments of available water resources shall be carried out and available water determinations made until the sum of available water determinations for the water year is 100% of share components.
- (5) The sum of available water determinations made for regulated river (high security) licences in any water year shall not exceed 100% of share components.

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- (6) Available water determinations made for regulated river (high security) access licences must take into account:
- (a) the environmental water provisions established by this Plan,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) volumes remaining in access licence water allocation accounts from previous available water determinations,
 - (g) water losses associated with the holding and delivery of water to meet the requirements specified in subclauses (a) to (f),
 - (h) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
 - (i) any other relevant matters.

38 Available water determinations for regulated river (general security) access licences

- (1) An available water determination is not to be made for regulated river (general security) access licences in any water year until the sum of available water determinations for regulated river (high security) access licences for the water year is equivalent to 100% of share components.
- (2) Providing subclause (1) has been satisfied, assessments of available water shall be made at least monthly, and available water determinations made for regulated (general security) access licences, if additional water can be provided to them.
- (3) Available water determinations for regulated river (general security) access licences shall be based on the volume available in Copeton Dam water storage after making provision for:
- (a) the environmental water provisions established by this Plan,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) requirements for regulated river (high security) access licences,
 - (g) allocations remaining in access licence water allocation accounts from previous available water determinations;
 - (h) water losses associated with the holding and delivery of water to meet the requirements identified in sub-clauses (a) to (g),
 - (i) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
 - (j) any other relevant matters.

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39 Available water determinations for supplementary water access licences

- (1) An available water determination shall be made at the commencement of each water year and shall define the percentage of supplementary water access licence share component that can be taken in that year.
- (2) The available water determination made under subclause (1) shall not exceed 100% of access licence share component or such lower percentage as results from the operation of clause 32 (2).

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Part 9 Rules for managing access licences

Division 1 General

40 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 20 (2) (e), 21 (a) and 21 (c) of the Act having regard to:

- (a) the environmental water rules established in Part 3 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 4 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 6 of this Plan.

Division 2 Water allocation account management

41 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.

42 Accrual of water allocations

Water allocations shall be accrued into each access licence water allocation account in accordance with the available water determinations made for the category of the access licence.

43 Volume taken under access licences

- (1) The water allocation taken under access licences, other than supplementary water access licences, shall be assessed as the greater of:
 - (a) the volume of water extracted by the approved water supply works nominated by the access licence, or
 - (b) the water ordered for extraction by the approved water supply works nominated by the access licence.
- (2) The water allocation taken under supplementary water access licences shall be assessed as the volume of water extracted, in accordance with announcements and access licence conditions, by the approved water supply works nominated by the access licence.

44 Accounting of assigned water allocations and return flows

- (1) Water allocations assigned from a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be debited from that water allocation account and water allocations assigned to a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be credited to that water allocation account.
- (2) Water allocations may also be re-credited to access licence water allocation accounts under section 76 of the Act, in accordance with water return flow rules established under section 75 of the Act.

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45 Carrying over of water allocation credits, water allocation account limits and debits for excess losses

- (1) The following rules shall apply to the management of water allocation in the water allocation accounts of local water utility access licences, domestic and stock access licences and regulated river (high security) access licences:
 - (a) the maximum volume that may be held in the accounts at any time shall be 100% of their access licence share component, and
 - (b) water allocation remaining in the accounts cannot be carried over from one water year to the next.
- (2) The following rules shall apply to the management of water allocations in the water allocation accounts of regulated river (general security) access licences:
 - (a) water allocation remaining in the accounts may be carried over from one water year to the next,
 - (b) the maximum volume that may be held in the accounts at any time shall be 150% of their access licence share component, and
 - (c) should the water provisions made in accordance with clauses 38 (2) (h) and 38 (2) (i) be expended then any further losses associated with the holding and delivery of water for all access licences in the water source shall be debited to each regulated river (general security) access licence account in proportion to the volume held in the account.
- (3) Water allocation remaining in the water allocation accounts of supplementary water access licences cannot be carried over from one water year to the next.

Division 3 Extraction conditions

46 General priority of extractions

Where extraction components of access licences do not specify the rate as a share of supply capability or a volume per unit time, the following priority of extractions shall apply whenever supply capability is insufficient to satisfy all orders for water in any section of this water source:

- (a) water shall be supplied to domestic and stock access licences, local water utility access licences and regulated river (high security) access licences that have placed orders for water, and
- (b) then any remaining supply capability shall be shared between regulated river (general security) access licences that have placed an order for water, in proportion to share components specified on the access licences.

47 Numerical specification of extraction components

- (1) At any time during the term of this Plan, the Minister may, in accordance with the mandatory conditions on access licences, amend the extraction components of access licences in this water source, or in any section of this water source.
- (2) Action under subclause (1) should be undertaken as follows:
 - (a) the specified rate in the extraction component of each access licence should be a volume per unit time or a share of supply capability,

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- (b) the specified rate in the extraction component of each domestic and stock, local water utility, and regulated river (high security) access licences should be sufficient to satisfy the maximum daily water needs, and
 - (c) after satisfying subclause (b), the remaining supply capability should be distributed among regulated river (general security) access licences in proportion to the share component of each access licence.
- (3) When action under subclause (1) is undertaken, the Minister may also, in accordance with mandatory conditions on access licences, amend the extraction components of access licences in other sections of the water source to exclude extractions in sections of the water source affected by the action under subclause (1).

48 Taking of water under supplementary water access licences

- (1) The taking of water under supplementary water access licences shall only be permitted in accordance with announcements made by the Minister
- (2) The maximum volume of water that may be taken under supplementary water access licences during each period of time to which an announcement applies shall be expressed as a percentage of each supplementary water access licence share component.
- (3) Taking of water under supplementary water access licences should be managed, as far as possible, to evenly share access opportunity amongst all supplementary water access licences.
- (4) Taking of water under supplementary water access licences should only be permitted when there are uncontrolled flows at the point of extraction and the uncontrolled flow is in excess of that required to provide any required downstream replenishment flows specified in clause 59.
- (5) No more than 50% of the supplementary water event volume may be permitted to be taken under supplementary water access licences during a supplementary water event.
- (6) The supplementary water event volume is:
 - (a) the volume of inflows to this water source which occurs between the time that inflows increased to a level sufficient to produce uncontrolled flows in this water source and the time they then decreased to a level which was no longer sufficient to produce uncontrolled flows in this water source, minus
 - (b) the volume of the inflows in subclause (a) that is required to provide sufficient flow to:
 - (i) meet the environmental provisions of the Plan,
Note. This includes the clause 14 provisions requiring that inflows from the Horton River, Myall creek and Halls Creek up to 500 ML/day per day be passed through to the Gwydir wetlands.
 - (ii) satisfy downstream domestic and stock rights and native title rights,
 - (iii) satisfy the water orders placed by regulated river (general security) access licences and higher priority access licences, and
 - (iv) provide any required replenishment flows specified in clause 59.
- (7) Taking of water under supplementary water access licences nominating works on the Mehi River, Carole Creek, or on rivers which receive effluent flows from the

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Mehi River or Carole Creek, shall not be permitted, or shall be restricted, when this is required to ensure the passage to the Barwon-Darling of locally generated uncontrolled flows needed to meet the requirements of the Interim Unregulated Flow Management Plan for the North West.

Note. The Interim Unregulated Flow Management Plan for the North West is also known as the North-West Unregulated Flow Management Plan.

- (8) For the purposes of subclause (7), locally generated uncontrolled flows shall mean any uncontrolled flow or portion of any uncontrolled flow in these rivers that is not the result of inflows from the Gwydir River.
- (9) The requirements of the Interim Unregulated Flow Management Plan for the North West are:
- (a) a flow of 14,000 ML/day in the Darling River at Brewarrina for 5 consecutive days, or 10,000 ML/day in the Darling River at Bourke for 5 consecutive days, during the period September to February inclusive, providing two such flow events have not already occurred during that period in that water year,

Note. This subclause is intended to provide opportunity for the passage of fish across the major weirs in the Barwon-Darling.

- (b) a flow of 2,000 ML/day in the Darling River at Wilcannia for 5 consecutive days during October to April, inclusive, providing flows of this quantity have not already been reached during the preceding three months within the October to April period, and

Note. This subclause is intended to protect flows needed to suppress blue-green algae blooms.

- (c) a flow of:
- (i) 150 ML/day in the Darling River at Wilcannia,
- (ii) 280 ML/day in the Darling River at Louth,
- (iii) 390 ML/day in the Darling River at Bourke,
- (iv) 550 ML/day in the Darling River at Brewarrina, and
- (v) 700 ML/day in the Barwon River at Walgett,

Note. This subclause is intended to protect flows needed to meet basic landholder rights requirements along the Barwon-Darling River.

- (10) The Minister may, under section 42 (2) of the Act and by notice published in the Gazette, alter or replace the rule set out in subclause (7) or the requirements set out under subclause (9) should the Interim Unregulated Flow Management Plan for the North West be altered, or replaced by new management arrangements, providing that such action:
- (a) only affects the taking of water under supplementary water access licences,
- (b) only relates to ensuring the taking of water under supplementary water access licences does not jeopardise critical environmental needs or the supply of water to basic rights holders, domestic and stock access licence holders and local water utility access licence holders in the Barwon Darling, and
- (c) in the Minister's opinion, does not substantially alter the long-term average volume of water that can be taken under supplementary water access licences in the Lower Namoi Regulated River Water Source.

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Part 10 Access licence dealing rules

49 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

Note. The access licence dealing principles referred to in subclause (1) are in Appendix 5.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. Access licence dealings include changes of licence ownership, conversions of licence category, movement of share component from one access licence to another access licence, movement of water allocation (ie assignment) from one access licence allocation account to another access licence allocation account and changes in the location of water supply that can take water available under the licence. These dealings must comply with the provisions of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

50 Rules relating to constraints within this water source

- (1) This clause relates to dealings under sections 71B, 71D, 71G, and 71J of the Act.
- (2) Until extraction components for access licences in the following sections of this water source have been amended in accordance with clause 47, a dealing in:
 - (a) the Gwydir River downstream of Tyreel Regulator,
 - (b) the Mehi River downstream of the Moomin Creek junction,
 - (c) Moomin Creek, and
 - (d) Carole Creek,

is prohibited if it would result in the total volume of the share components of domestic and stock access licenses, regulated river (high security) access licences and regulated river (general security) access licences nominating water supply works on any of these sections of this water source exceeding the total at the commencement of this Plan.

- (3) Assignment of water allocations from a supplementary water access licence water allocation account to an access licence of any other access licence category is prohibited.
- (4) Assignment of water allocations to a supplementary water access licence water allocation account from an access licence of any other access licence category is prohibited.

51 Rules for change of water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been effected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.

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- (2) Access licences in other water sources may be issued following cancellation of access licences in this water sources only if:
- (a) the access licence dealing rules in the receiving water source permit such a dealing,
 - (b) a conversion factor, established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, has been applied, and
 - (c) the water source is within the Gwydir Water Management Area.

Note. The degree of hydrologic connection between the Gwydir and other Murray-Darling river systems is insufficient to permit dealings between the Gwydir and these systems to occur.

- (3) Access licences in this water source may be issued following cancellation of access licences in other water sources only if:
- (a) the access licence dealing rules in the other water source permit such a dealing,
 - (b) a conversion factor, established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in these water sources, has been applied, and
 - (c) the water source is within the Gwydir Water Management Area.

Note. The access licence dealing principles gazetted on 27 December 2002 prohibit a change of water source dealing where the movement is from an unregulated river water source to a regulated river water source.

52 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category is prohibited except as provided for under this clause.
- (3) On application of the access licence holder, the Minister may cancel a regulated river (general security) access licence, and issue a regulated river (high security) access licence, subject to:
- (a) the application of a conversion factor established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in these water sources, and
 - (b) the volume of water in the regulated river (general security) access licence water allocation account being equal to or greater than its share component volume.

Note. The volume of water in the regulated river (general security) access licence water allocation account which is in excess of the share component volume of the new regulated river (high security) access licence will not be credited to the new regulated river (high security) access licence account.

- (4) On application of the access licence holder, the Minister may cancel a regulated river (high security) access licence, and issue a regulated river (general security) access licence, subject to:

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- (a) the application of a conversion factor equal to one divided by the conversion factor established in subclause (3), and
- (b) the total volume of regulated river (general security) access licence share components not increasing above the total volume of regulated river (general security) access licence share components at the time of commencement of Part 2 of Chapter 3 of the Act.

Note. This would allow conversion of a regulated river (high security) access licence to a regulated river (general security) access licence only if there had been a corresponding or larger volume of regulated river (general security) access licence share component converted to regulated river (high security) access licence.

53 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Access licence equivalents in other States may not be transferred into this water source.
- (3) Access licences in this water source may not be transferred into another State.

54 Rules for water allocation assignment between water sources

- (1) This clause relates to dealings under section 71G of the Act in relation to water allocation assignments between water sources.
- (2) Water allocations from the water allocation accounts of access licences in this water source may not be assigned to the water allocation accounts of access licences in other water sources.
- (3) Water allocations from the water allocation accounts of access licences in other water sources may not be assigned to the water allocation accounts of access licences in this water source.

55 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Water allocation equivalents from other States may not be assigned to the water allocation accounts of access licences in this water source.
- (3) Water allocations from the water allocation accounts of access licences in this water source may not be assigned to water allocation equivalents in other States.

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Part 11 Mandatory conditions

56 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
Note. The Minister may impose discretionary conditions at any time on an access licence in accordance with section 66 (1) (b) of the Act.
- (2) All access licences in this water source shall have mandatory conditions to give effect to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence,
 - (c) the requirement that extraction under the access licence shall be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence shall be subject to the water allocation account management rules established in Part 9 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence may only occur if the resulting debit to the access licence account shall not exceed the volume of water allocation remaining in the licence account,
 - (f) the requirement that water may only be taken by water supply works nominated on the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.
- (3) All access licences shall have a mandatory condition that facilitates the provisions of clause 47 of this Plan.
- (4) All domestic and stock access licences, local water utility access licences, regulated river (high security) access licences and regulated river (general security) access licences shall have mandatory conditions that only allow the taking of water if it has been ordered in accordance with procedures established by the Minister.
- (5) All regulated river (general security) access licences shall have mandatory conditions to give effect to the provisions in clause 33 of this Plan.
- (6) All supplementary water access licences shall have mandatory conditions that only allow the taking of water in accordance with announcements, as specified in clause 48, and after satisfying any procedures established by the Minister,
- (7) All domestic and stock access licences, other than domestic and stock (domestic only) access licences shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption or stock watering as defined in section 52 of the Act.
- (8) All domestic and stock (domestic only) access licences shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption as defined in section 52 of the Act.
- (9) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act.

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57 Mandatory conditions on water supply works approvals

All approvals for water supply works in these water sources shall have mandatory conditions to give effect to the following:

- (a) flow measurement devices shall be installed and maintained on all works used for extraction of water under an access licence and shall be of a type, and shall be maintained in a manner, which is acceptable to the Minister,
- (b) water extraction, property water management infrastructure and cropping details shall be provided on request, in the form and in accordance with procedures established by the Minister, and
- (c) the taking of water may only occur in accordance with the conditions applying to the access licence from whose water allocation account the taking of water will be debited.

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Part 12 System operation rules

58 System operation rules

This Part is made in accordance with section 21 (e) of the Act.

59 Replenishment flows

- (1) The following replenishment flows shall be provided, if required:
 - (a) up to 6,000 megalitres per water year to the Gingham Watercourse,
 - (b) up to 4,000 megalitres per water year to the Gwydir River downstream of this water source,
 - (c) up to 6,000 megalitres per water year to Mallowa Creek,
 - (d) up to 4,000 megalitres per water year to Thalaba Creek, and
 - (e) up to 500 megalitres per water year to Ballinboora Creek.
- (2) Sufficient volumes of water must be set aside from assured inflows into this water source and reserves held in Copeton Dam water storage to provide for subclause (1).

60 Water delivery and channel capacity constraints

Where necessary for determining extraction rights, managing water releases or providing water under access licences, the maximum water delivery or operating channel capacity shall be determined and specified in accordance with procedures established by the Minister, taking into account:

- (a) inundation of private land or interference with access,
- (b) the effects of inundation on the floodplain and associated wetlands,
- (c) the transmission losses expected to occur,
- (d) capacities of water management structures controlled by the Minister, and
- (e) SWMOP targets.

Note. The following capacities have been assessed:

- (i) Carole/Gil Gil - 2,200 ML/day,
- (ii) Mehi River - 5,800 ML/day,
- (iii) Moomin Creek - 2,200 ML/day, and
- (iv) Gwydir River d/s Tyreel - 1,100 ML/day.

61 Rates of change to storage releases

Rules regarding rates of change to releases from water storages should be specified in accordance with procedures established by the Minister and take into account:

- (a) relevant environmental considerations,
- (b) damage to river banks, and
- (c) public safety.

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62 Supply of orders when remaining allocations are low

- (1) If, in the opinion of the Minister, the total remaining volume of water in access licence allocation accounts has reduced to a level where the continuous delivery of water orders would involve unacceptably high delivery losses, water orders may be grouped and released periodically.
- (2) The Minister should seek advice from irrigation industry representatives regarding the circumstances under which action under subclause (1) should be taken and the manner of management.

63 Dam operation during floods and spills

- (1) The operation of Copeton Dam during times of flood and spilling of water is to be undertaken in a manner that maintains the safety of dam infrastructure.
- (2) Providing it is consistent with subclause (1), operation :
 - (a) should leave the storage at full supply level at the completion of the flood or spilling of water,
 - (b) during floods should ensure the general rate of increase of outflow does not exceed the rate of increase of inflow,
 - (c) should aim to lessen downstream flood damage where possible, and
 - (d) may involve temporary storage of water above the normal maximum available storage level to reduce flood effects, and management of the rate of release of this water to avoid aggravating downstream flood damage.

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Part 13 Monitoring and reporting

64 Monitoring

The monitoring of the performance indicators specified in clause 12 of this Plan shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with the water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the Implementation Program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program are included in the annual report for the Department.

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Part 14 Amendment of this Plan

65 Changes to this water source

The Minister, under section 42 (2) of the Act and by notice published in the Gazette, may add a river or section of river to this water source or remove a river or section of river from this water source providing that:

- (a) any river or section of river that is added has been declared to be a regulated river by an order published in the Gazette, and
- (b) the Minister is satisfied that there will be no impact on environmental water or on the available water to any access licences in this water source.

66 Other amendments of this Plan

The Minister, under section 42 (2) of the Act and by notice published in the Gazette, may amend this Plan, in accordance with clause 48 (10), in respect to the requirements or arrangements affecting taking of water under supplementary water access licences nominating works on the Mehi River, Carole Creek, or on rivers which receive effluent flows from the Mehi River or Carole Creek.

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

airspace is a volume in a **water storage**, which is kept empty for the purpose of mitigating potential floods.

assured inflows are the volumes of water which historic hydrologic information indicates are the minimum which can be expected to flow into the water source.

available water in relation to a water management area or water source, is the water that is available in that area or water source in accordance with an **available water determination** that is in force in respect of that area or water source.

available water determination is a written order by the Minister as to the availability of water for the various categories of access licence in relation to a specified water management area or water source.

Department is the Department of Land and Water Conservation or its successor.

the **Cap** is as defined in Schedule F of the Murray Darling Basin Agreement.

Cap baseline conditions are those used for assessment of Cap in Schedule F of the Murray Darling Basin Agreement and relate to the level of water resource development at June 1994.

conversion factor refers to the adjustment factor that may be applied to the size of share components when they are part of a dealing under 71B or 71E of the Act.

extraction component is the extraction component of an access licence as defined in 56 (1) of the Act.

floodplain harvesting is the collection or capture of water flowing across floodplains.

full supply level is the storage level considered to be the limit for the purposes of storage of water, except in periods of flood operation.

long term average annual extraction is the average of annual water extractions from the water source over the period for which an assessment is carried out.

Minister is the Minister for Land and Water Conservation. The Minister may delegate his functions under section 389 of the Act.

Murray Darling Basin Agreement is the agreement between the Commonwealth of Australia and the states of New South Wales, Victoria and South Australia as referred to in the *Murray Darling Basin Act, 1992*, for the purpose of promoting and co-ordinating effective planning and management for the equitable, efficient and sustainable use of the water, land and other environmental resources of the Murray-Darling Basin.

replenishment flows are flows provided to refill pools and water holes in effluent river systems downstream of the water source and provide water for household and town use and stock.

reserves are volumes of water put aside in a **water storage** to allow the supply of future water requirements.

share component is the share component of an access licence as defined in 56 (1) of the Act and, for the purposes of this Plan, any right to take water under the Water Act 1912

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that gives rise to share component of an access licence under the Water Management Act 2000 (as amended).

supplementary water event is a continuous period during which the taking of water under supplementary water access licences is being permitted in all or part of the water source

supply capability is defined as the rate at which water that can be supplied to a section of a water source after satisfying the environmental water provisions and the requirements for water to satisfy basic land holder rights.

uncontrolled flow is flow, in excess of that needed to meet the environmental provisions of the Plan, basic landholder rights and water orders placed by regulated river (general security) access licences and higher priority access licences in a water source.

water storage means a state owned dam, weir or other structure, which is used to regulate and manage river flows in this water source and the water body impounded by this structure.

water supply system includes the water storages and all other factors influencing water supply that are under the control of the Minister.

water use development includes all privately owned water management structures, and all aspects of farm, industry, town or private household development which affect the volumes of water taken from these water sources, and the management practices that are applied in relation to them.

water year is 1 July to 30 June

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Schedule 2 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL	contributes to target in full
HIGH	while not fully contributing to target, there is a good level of contribution
PARTIAL	goes some way to contributing to the target
LOW	only small degree of contribution to target

Relevant Target	Level of Contribution	Comments
Target 1a Extractions in Murray Darling Basin's regulated rivers limited to the level of the long-term average annual extraction below the Murray Darling Basin Ministerial Council (MDBMC) Cap which results from the long-term impact of the environmental water rules	FULL	<ul style="list-style-type: none"> This Plan clearly sets out the basis for the long-term extraction limit in Part 8.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon.	FULL	<ul style="list-style-type: none"> Rules set out in Part 8.
Target 2 All water management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes.	PARTIAL	<ul style="list-style-type: none"> Environmental flow rules significantly improve inflows into the wetlands compared to Cap. This Plan provides a 45,000 ML Environmental Contingency Allowance. 4 species (River Snail, Silver Perch, Purple spotted gudgeon, Olive perchlet) occurring in Gwydir have been listed as threatened. This Plan should assist in the protection / recovery of these species. 16 wetland and floodplain dependent birds listed as threatened occur in the Gwydir. 14 bird species protected under JAMBA and CAMBA also occur. NPWS have indicated that they consider the environmental flow rules provide only the minimum necessary to protect these species.
Target 4a Where the frequency of "end of system" daily flows would be less than 60 percent of the predevelopment level without environmental water rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent of the predevelopment frequency.	FULL	<ul style="list-style-type: none"> This Plan meets the target for wetland inflows as follows: 50th percentile flows are 100% of predevelopment under Plan, 30th percentile flows are 97% of predevelopment under this Plan, 10th percentile flows are improved by more than 10% (ie increased from 15% of predevelopment under the Cap to 40% under this Plan).

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Relevant Target	Level of Contribution	Comments
Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95 th percentile.	FULL	<ul style="list-style-type: none"> This Plan maintains the predevelopment 95th percentile flow frequency for the wetland inflows.
Target 4c The channel capacity of all lower river and effluent creek systems used for the delivery of regulated water determined. Subject to reasonable socio-economic impacts, limits on daily supply volumes established for effluent systems such that they do not exceed 80 percent of the channel capacity for more than 10 percent of days in each month of each year. Where daily supply volumes are currently substantially less than channel capacity, alternative limits established to reduce the impact of unseasonal flows arising from future access licence dealings.	PARTIAL	<ul style="list-style-type: none"> This Plan provides for the determination of maximum operating channel capacities. This Plan provides for the distribution of numerical extraction rights that could be used to facilitate management to desired capacity targets. This Plan notes a number of maximum channel capacity constraints for the Gwydir River, Mehi River, Moomin Creek and Carole Creek which are to apply at the commencement of the Plan.
Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components.	FULL	<ul style="list-style-type: none"> Access for existing regulated access licences and supplementary water access licences are specified and tradeable.
Target 9a Flow thresholds for declaration of supplementary water access, which take into account environmental needs, clearly specified.	HIGH	<ul style="list-style-type: none"> This Plan specifies that inflows up to 500 ML/day from 3 of this water source’s major tributaries goes through to the wetlands. There has been no consideration of thresholds for within river purposes or effluent streams.
Target 9b Annual limits on supplementary water extractions, consistent with the long-term average annual extraction limits, established in all regulated river water sources.	FULL	<ul style="list-style-type: none"> This Plan sets the maximum available water determination for supplementary access licences at the full entitlement of 170,000 megalitres.
Target 9c Rules for sharing between supplementary water licence holders made explicit.	PARTIAL	<ul style="list-style-type: none"> This Plan does not clearly specify any sharing rules however, it does provide for “evenly sharing” access between supplementary water access licences.
Target 9d Supplementary access licence dealings made possible in regulated river water sources, subject to extraction limits and environmental assessment and Aboriginal spiritual and cultural constraints.	FULL	<ul style="list-style-type: none"> Trading of supplementary access water is permitted.
Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use.	FULL	<ul style="list-style-type: none"> Obligations are set out in Part 5.

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Relevant Target	Level of Contribution	Comments
Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them.	PARTIAL	<ul style="list-style-type: none"> This Plan does not specifically address Aboriginal cultural or traditional requirements and has not identified any sites of particular importance. However, the significant improvement in environmental flows achieved under this Plan should contribute to protecting or improving Aboriginal values.
Target 16a All share components of access licences tradeable.	FULL	<ul style="list-style-type: none"> All entitlements (including supplementary water) will be tradeable under this Plan.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water.	FULL	<ul style="list-style-type: none"> Transfers between water sources are in line with Government policy and the Minister's Access Licence Dealing Principles.
Target 16d Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery	FULL	<ul style="list-style-type: none"> This Plan does not impose reduction factors.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit.	PARTIAL	<ul style="list-style-type: none"> There is some delineation of transfer zones and application of transfer restrictions pending numerical specification of extraction rights.
Target 35 All water management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current ANZECC Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries.	HIGH	<ul style="list-style-type: none"> This Plan includes a water quality objective and a 45,000 megalitre ECA.

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Appendix 1 Rivers and lakes within this water source

The Gwydir Regulated River Water Source includes, but is not limited to, the following rivers and lakes:

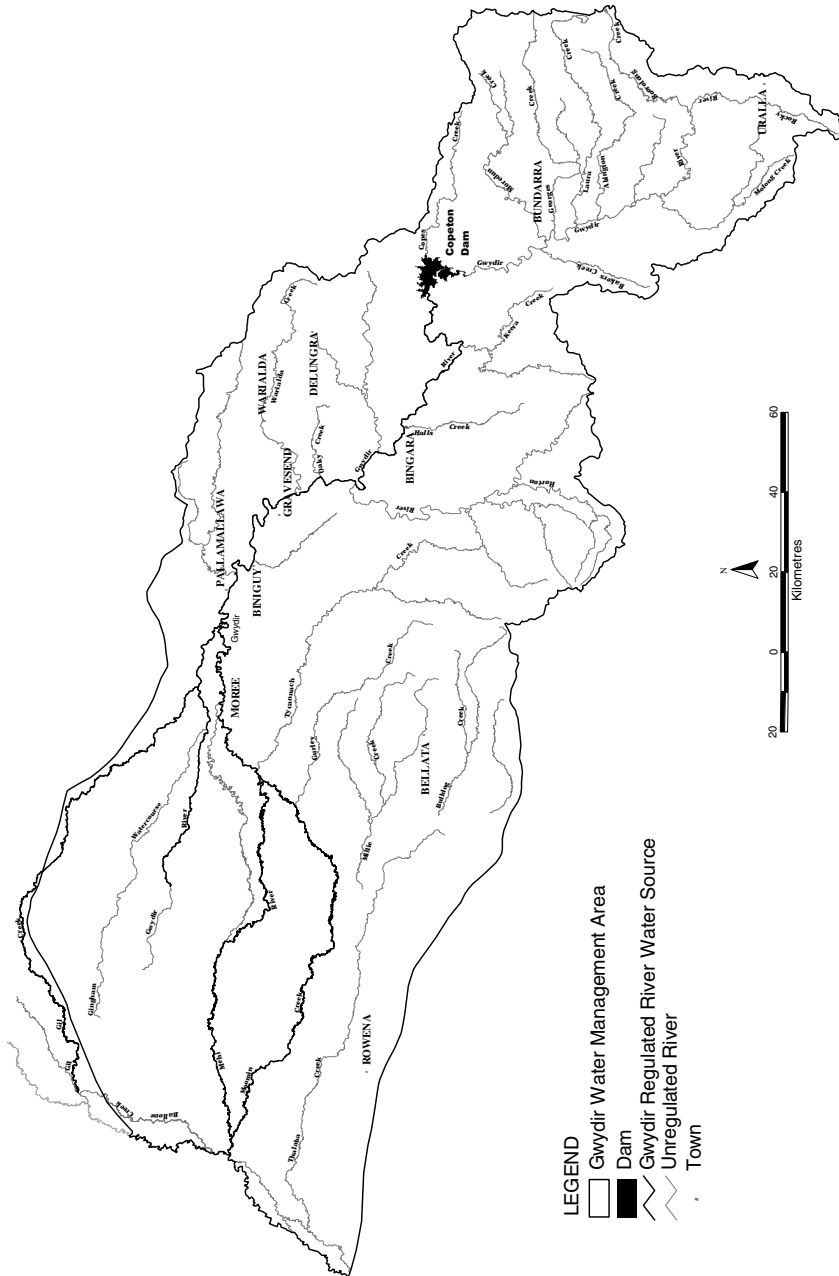
- (a) Boomi River from its confluence with Gil Gil Creek in portion 3, Parish of Bibble, County of Benarba, downstream to its confluence with the Barwon River in portion 2, Parish of Bibble, County of Benarba.
- (b) Carole Creek from its offtake from the Gwydir River in portion 52, Parish of Boolooroo, County of Courallie downstream to its confluence with Gil Gil Creek.
- (c) Gil Gil Creek from its confluence with Carole Creek in T.S.R. 15022, Parish of Gocalla, County of Benarba, downstream to its confluence with Boomi River.
- (d) Gwydir Pool from the bifurcation near portion 56, Parish of Carore, County of Courallie, downstream to "The Raft."
- (e) Gwydir River from the upper limit of Copeton Dam storage downstream to the northwestern boundary of portion 27, Parish of Gin, County of Benarba, including all tributaries to the storage (named and unnamed) up to high water mark of the storage
- (f) Marshalls Ponds Creek from its confluence with Carole Creek upstream to a point 100 metres east of the common boundary of portions 15 and 16, Parish of Bogree, County of Courallie.
- (g) Mehi River, from the Tarelaroi cutting in portion 16, Parish of Mia Mia, County of Courallie, downstream to the Barwon River.
- (h) Moomin Creek from Combadello Weir downstream to its confluence with the Mehi River.
- (i) Tyreel Anabranh.
- (j) Unnamed Watercourse, from its upstream confluence with Moomin Creek, located approximately 404m downstream from the eastern boundary of portion 33, Parish of Bunna Bunna, County of Benarba, to its downstream confluence with Moomin Creek, located approximately 503m from the upstream confluence, all within the abovementioned portion, parish and county.
- (k) Unnamed watercourse offtaking from the Gwydir River within portion 39, Parish of Ardgowan, County of Courallie and rejoining the Gwydir River within portion 54, Parish of Ardgowan, County of Courallie.

Note. The following rivers receive domestic and stock replenishment flows from the Gwydir Regulated River Water Source but do not themselves form part of this water source:

- Gingham Channel,
- Mallowa Creek,
- Lower Gwydir River,
- Ballinboora Creek, and
- Thalaba Creek.

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Appendix 2 Gwydir River system



Appendix 3 State floodplain harvesting principles

Section 1 Definition and categories of floodplain harvesting

- (1) Floodplain harvesting is the collection, extraction or impoundment of water flowing across floodplains. The floodplain flows can originate from local runoff that has not yet entered the main channel of a river, or from water that has overflowed from the main channel of a river during a flood. For the purposes of this policy the floodplain is defined as extending to the 1 in 100 year flood line.
- (2) Floodplain harvesting can generally be put into one of three categories:
 - (a) diversion or capture of floodplain flows using purpose built structures or extraction works to divert water into storages, supply channels or fields or to retain flows,
 - (b) capture of floodplain flows originating from outside of irrigated areas using works built for purposes other than floodplain harvesting. Examples are:
 - (i) levees and supply works such as off river storages constructed in billabongs or depressions that fill from floodplain flows, and
 - (ii) below ground level water channels from which the water is pumped into on farm storages, and
 - (c) opportunistic diversions from floodplains, depressions or wetlands using temporary pumps or other means.

Note. Capture of rainfall or runoff from farm irrigation fields, via tailwater systems or other means, is not floodplain harvesting.

Section 2 Floodplain harvesting management issues

- (1) The harvesting of water from floodplains reduces the amount of water reaching or returning to rivers. This decreases the amount of water available to meet downstream river health, wetland and floodplain needs and the water supply entitlements of other users.
- (2) Floodplain harvesting can seriously affect the connectivity between the local floodplain, wetlands and the river, through the loss of flow volume and redirection of water flows.
- (3) The *Water Act 1912* provided powers to license floodplain harvesting. However this was never applied as there was generally no requirement to restrict total overall water extractions or off-allocation diversions. Harvested floodplain water has been treated as a freely available bonus to a farmer's licensed entitlement.
- (4) This situation has now changed. The Murray-Darling Basin cap applies to all water diverted from inland NSW catchments and rivers. Licensed and off-allocation access has been subject to increasing restrictions. Embargoes on water licences are also in place on many areas on the coast.
- (5) Floodplain harvesting works and water extractions also clearly fall into those activities that the *Water Management Act 2000* requires to be only undertaken by way of a licence. The Act also requires such licensing to consider the ecological functioning of floodplains.
- (6) Floodplain harvesting can no longer be left outside of the State's water management and compliance system or as a source of increase in further water extractions. Given this, it is the Government's intention that floodplain harvesting

works and taking of water from floodplains be licensed and managed. It will take a number of years to complete the process. However, the water sharing plans must signal the basic principles that will govern the process.

Section 3 Management of floodplain harvesting

- (1) Floodplain harvesting will not be a component of individual water sharing plans being produced for the regulated and unregulated rivers. During flood times water originating in one river system may flow across floodplains and along “flood runners” into adjacent river systems. It is therefore often not possible to assign an area of floodplain to a particular river.
- (2) Management of floodplain harvesting will occur on a state-wide basis, according to the six principles set out in section 4.
- (3) There are many thousands of existing floodplain works which will require licensing and this will be done over the next couple of years. The licensing process will include proper environmental impact assessments.
- (4) A separate category of licence will be established.

Section 4 Floodplain harvesting principles

- (1) Principle 1 is that all existing floodplain harvesting works and floodplain harvesting extractions will be licensed.
- (2) Principle 2 is that licensing will focus initially on controlling the structures, but with movement towards specifying volume limits and flow related access conditions, including metering of pumps

Note. While all surface and groundwater licences now (or will shortly) specify volume entitlements or annual limits to water, it is not possible to do this for floodplain harvesting licences at this stage. This is because the pattern of use is highly episodic and site and infrastructure specific, and current data on structures and use is minimal.

The Department of Land and Water Conservation will licence existing structures and specify monitoring of use (including metering of pumps) as a licence condition where possible. This may not be possible initially in cases where a tailwater system is also picking up floodplain water as they are difficult to separate, or where overland flow is being captured by a billabong for which we do not have any information on its capacity. Options for application of volumetric conditions will be developed and implemented where appropriate within the first five years of the initial water sharing plans.

- (3) Principle 3 is that no new works or expanded floodplain harvesting activities in the Murray-Darling Basin that will result in the diversion of additional water will be authorised.

Note. All new floodplain harvesting works are required by law to be licensed. However, as any new works would result in a growth in diversion, which would threaten river health and/or the water entitlements of others, such works would have to be offset by a reduction in other forms of water diversion.

- (4) Principle 4 is that floodplain diversions associated with works in place in the Murray-Darling Basin prior to the end of the 1994 irrigation season will be considered as within the NSW cap.

Note. Because cap is based on the use of water with development as it was in 1994, NSW considers that the water use that would result from use of the floodplain infrastructure in place in 1994, is part of the cap in each system.

- (5) Principle 5 is that once licensing is completed, an assessment of long-term use resulting from authorised structures against that from structures which existed in 1994 will be carried out and appropriate steps taken to keep harvesting to cap levels.

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Note. It is likely that there has been some growth in floodplain harvesting works and extractions since 1994. However, it is expected that the licensing process will result in some modification of existing works. This may be adequate to offset any post 1994 development. If not, restrictions on the use of the licensed works will have to be applied to return diversions to cap levels. Such restrictions could include restrictions on pumping times or a requirement to modify the work to allow a proportion of flows to be bypassed. By preventing the construction or enlargement of new works, the opportunity for any further growth in floodplain harvesting diversions will be minimised.

- (6) Principle 6 is that floodplain harvesting rights will not be tradeable.

Note. Trading of floodplain harvesting rights will not be permitted because the frequency and volume of use is site and infrastructure specific, and volume management will take some time to implement.

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Appendix 4 Performance indicators

Performance indicators for the Gwydir Regulated River Water Sharing Plan			
Performance indicator	Related objective	As measured by:	Commentary
(a) Change in ecological condition of the water source and dependent ecosystems.	clause 10 (a) clause 10 (c)	<ul style="list-style-type: none"> Monitoring of ecological response to changed flow regimes, by IMEF (each water source will have specific hypotheses from the set developed under IMEF). Other relevant studies as may be undertaken in specific water sources. 	<ul style="list-style-type: none"> IMEF tests a number of hypotheses to indicate how elements of river ecology respond to different aspects of the flow regime (including EFRs, irrigation flows, and floods and wetland connectivity).
(b) Change in low flow regime	clause 10 (a) clause 10 (c)	<ul style="list-style-type: none"> Number of days per water year where flow is below natural 95th and 80th percentiles. Average and maximum number of days per water year of continuous periods of flow which is below natural 95th and 80th percentiles. Measurement at end of system and specified key sampling sites. 	<ul style="list-style-type: none"> Government's River Flow Objectives (RFOs) 1 and 6. Analysis would need to incorporate reference to seasonal indicators. Long term modelling will reflect the influence of climate on flows. Appropriate data relating to flow distribution, such as summer/winter cropping balance, agronomical practices, on farm storage development, management and operation of environmental releases etc. Baseline audit should be the modelled WSP scenario (rather than natural flows).
(c) Change in moderate to high flow regime	clause 10 (a) clause 10 (c)	<ul style="list-style-type: none"> Number of days per water year where flow is above natural 30th 15th and 5th percentiles. Average and maximum number of days per water year of continuous periods of flow which is above natural 30th, 15th and 5th percentiles. Measurement at end of system and other key sampling sites in the water source. 	<ul style="list-style-type: none"> RFO 3
(d) Change in water quality	clause 10 (d)	<ul style="list-style-type: none"> Assessment and statistical analysis of key water quality parameters, and relationship to flow. 	<ul style="list-style-type: none"> The Plan rules will contribute to a long term change in water quality by affecting flow regimes and flow management to address issues such as algal management. There are many non-water sharing plan related factors that affect water quality (eg land-based activities and thermal pollution).

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(e) Extent to which basic landholder rights requirements have been met	clause 10 (f)	<ul style="list-style-type: none"> Basic rights allowances made according to plan provisions/implementation program requirements. Flows adequate to meet basic rights requirements (taking into consideration allowances for delivery). 	<ul style="list-style-type: none"> Basic rights usage figures in water sharing plans are estimated volumes (not actual use). Basic rights represents a very small proportion of water extraction in regulated systems.
(f) Extent to which local water utility and major utility requirements (where major utilities are involved in urban water provision) have been met.	clause 10 (b)	<ul style="list-style-type: none"> Percentage of years that reserves were adequate to satisfy urban water requirements. 	
(g) Change in economic benefits derived from water extraction and use	clause 10 (e)	<ul style="list-style-type: none"> Change in regional gross margins versus annual total extractions based on year 1 benchmarks (as represented in IQQM). Movement of water to higher value crops as measured by increases in area and/or water extracted by these enterprises versus lower value uses. Change in unit price of water transferred. Annual total volume of access licence transferred (ML) in each water year. 	<ul style="list-style-type: none"> There are many factors affecting economic status of a region, for example commodity prices, other sources of water (eg groundwater). The PI is intended to isolate as much as possible the effects of water availability and price on the gross margin returns at a regional level. Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan provisions.
(h) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	clause 10 (h)	<ul style="list-style-type: none"> Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of 5 years there should be relevant information collected for each water source, as a minimum requirement.
(i) Extent to which native title rights have been met.	clause 11 (h)	<ul style="list-style-type: none"> Native title rights allowances made according to plan provisions/implementation program requirements. 	

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Appendix 5 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

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dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

groundwater source means a water source specified in a groundwater management plan.

hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:

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- (a) the total volume of share components, or
- (b) the total volume of water allocations in water allocation accounts, or
- (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.
- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.

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- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
- (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or
 - (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:

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- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
- (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:

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- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water

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allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.

- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:
- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or

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- (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.

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- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
- (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
- (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

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Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
 - (a) if either of the access licences is suspended under section 78 of the Act, or
 - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
 - (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:

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- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

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20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or
 - (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
 - (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

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- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2003

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Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2003

Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2003

Part 1 Introduction

1 Name of plan

This Plan is the *Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000 as amended* (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2003 and ceases 10 years after that date.

4 Water sources and waters to which this Plan applies

- (1) The water sources in respect of which this Plan is made shall be known as the Upper Namoi Regulated River Water Source and the Lower Namoi Regulated River Water Source (hereafter **these water sources**).
- (2) The Upper Namoi Regulated River Water Source is that between the banks of all rivers, from the upper limits of Split Rock Dam water storage downstream to the upper limits of Keepit Dam water storage, which at the date of commencement of this Plan, have been declared by the Minister to be regulated rivers.
- (3) The Lower Namoi Regulated River Water Source is that between the banks of all rivers, from the upper limits of Keepit Dam water storage downstream to the junction of the Namoi River with the Barwon River, which at the date of commencement of this Plan, have been declared by the Minister to be regulated rivers.

Note. A regulated river is a river that has been declared by the Minister, by order published in the New South Wales Government Gazette, to be a regulated river.

Note. The regulated rivers referred to in subclauses (2) and (3) are listed in Appendix 1.

- (4) The rivers included in these water sources may be varied under section 42(2) of the Act, as set out in Part 14 of this Plan.
- (5) These water sources are within the Namoi Water Management Area as constituted by the Ministerial order published in the NSW Government Gazette (hereafter **the Gazette**) on 23 November 2001.

Note. The Namoi Water Management Area is shown on the map in Appendix 2.

- (6) This Plan applies to all waters contained within these water sources but does not apply to water contained within aquifer water sources underlying these water sources or to waters on land adjacent to these water sources.

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Note. Management of floodplain harvesting is not a component of this water sharing plan. Management of floodplain harvesting will occur according to a number of state-wide management principles, attached in Appendix 3.

5 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan, unless redefined in Schedule 1, and the effect of these terms may be explained in Notes.
- (2) Additional terms are defined in Schedule 1.
- (3) Notes in this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

6 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from the date of commencement to those matters that are being administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible the rules embodied in this Plan shall apply to matters administered under the *Water Act 1912* in the interim.

7 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act this Plan is consistent with the State Water Management Outcomes Plan published in the Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 2 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to these targets.

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Part 2 Vision, objectives, strategies and performance indicators

8 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

9 Vision

The vision for this Plan is to have a sustainable, healthy river system that provides equitable water access for all uses and users through flow management.

10 Objectives

The objectives of this Plan are to:

- (a) protect, preserve, maintain or enhance the important river flow dependent environmental features and Aboriginal, cultural and heritage values of these water sources,

Note. Although there are no specific strategies directly related to Aboriginal, cultural and heritage values the limits placed on the taking of water under supplementary water access licences and the long-term extraction limit provisions may provide some protection or enhancement.

- (b) manage these water sources to ensure equitable sharing between all users,
- (c) protect basic landholder rights of owners of land,
- (d) provide opportunities for market based trading of regulated water entitlement within sustainability and system constraints,
- (e) provide sufficient flexibility in water account management to encourage responsible use of available water, and
- (f) contribute to the maintenance of water quality.

Note. Although there are no specific strategies directly related to the maintenance of water quality in this Plan, the supplementary water access provisions should contribute to maintenance of water quality in these water sources. It should be recognised that water quality objectives will essentially be addressed through other planning processes.

11 Strategies

The strategies for this Plan are to:

- (a) establish environmental water provisions (Part 3 of this Plan),
- (b) identify water requirements for basic landholder rights (Part 4 of this Plan),
- (c) identify water requirements for access licences (Part 6 of this Plan),
- (d) establish rules for granting of access licences (Part 7 of this Plan),
- (e) establish provisions that place limits on the availability of water (Part 8 of this Plan),
- (f) establish rules for making available water determinations (Part 8 of this Plan),
- (g) establish rules for the operation of water accounts (Part 9 of this Plan),

Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2003

- (h) establish provisions specifying circumstances under which water may be extracted (Part 9 of this Plan), and
- (i) establish access licence dealing rules (Part 10 of this Plan).

12 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in the ecological condition of these water sources and dependent ecosystems,
- (b) change in low flow regime,
- (c) change in moderate to high flow regime,
- (d) change in water quality in these water sources,
- (e) extent to which domestic and stock rights requirements have been met,
- (f) extent to which local water utility requirements have been met,
- (g) change in economic benefits derived from water extraction and use,
- (h) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (i) extent to which native title rights have been met.

Note. Appendix 4 details the objectives to which these performance indicators relate and the methods for assessing indicators.

Part 3 Environmental water provisions

13 Environmental water provisions

This Part is made in accordance with sections 5 (3), 8 (1), 8 (2) and 20 (1) (a) of the Act.

14 Environmental health water

This Plan establishes the following environmental health water rules:

- (a) water volume in excess of the long-term extraction limit established in clause 30 of this Plan may not be taken from these water sources and used for any purpose, and
- (b) water availability is to be managed as specified in clause 32 of this Plan to ensure water volume in excess of the long-term extraction limit is not being taken.

Note. By limiting long-term average extractions to an estimated 238,000 megalitres per year this Plan ensures that approximately 73% of the long-term average annual flow in these water sources (estimated to be 870,000 megalitres per year) will be preserved and will contribute to the maintenance of basic ecosystem health.

15 Supplementary environmental water

- (1) This Plan establishes the rule in subclause (2) as a supplementary environmental water rule.
- (2) In the months of June, July and August, a minimum daily flow which is equivalent to 75% of the natural 95th percentile daily flow for each month, shall be maintained in the Namoi River at Walgett (streamflow gauging station number 419091).

Note. Clause 49 of this Plan specifies limits to total extractions by all Lower Namoi supplementary water access licence holders during periods when flows are above specified threshold flow levels. These rules contribute to a number of interim river flow objectives:

- protecting important rises in water levels,
- maintaining wetland and floodplain inundation and,
- maintaining natural flow variability.

16 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there shall be a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

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Part 4 Basic landholder rights

17 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

18 Domestic and stock rights

Note. Water from these water sources should not be consumed without prior treatment which is adequate to ensure its safety.

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights in the Upper Namoi Regulated River Water Source are estimated to be 160 megalitres per year (hereafter *ML/year*).
- (2) At the commencement of this Plan the water requirements of holders of domestic and stock basic rights in the Lower Namoi Regulated River Water Source are estimated to be 1,776 ML/year.
- (3) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting these water sources or by an increase in the exercise of domestic and stock rights on landholdings.

- (4) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising domestic and stock rights through a repeat of the worst period of low inflows into these water sources, as represented in flow information held by the Department.
- (5) To achieve subclause (4), sufficient volumes of water must be set aside from assured inflows into these water sources and in reserves held in Split Rock Dam water storage, Keepit Dam water storage and other water storages.

Note. The Minister may issue an order under section 328 of the Act to restrict the exercise of domestic and stock basic rights from these water sources to protect the environment, for reasons of public health, or to preserve basic landholder rights.

19 Native title rights

Note. Water from these water sources should not be consumed without prior treatment which is adequate to ensure its safety.

- (1) At the commencement of this Plan there are no holders of native title rights in the Upper Namoi Regulated River Water Source and therefore native title rights are 0 ML/year.
- (2) At the commencement of this Plan there are no holders of native title rights in Lower Namoi Regulated River Water Source and therefore native title rights are 0 ML/year.
- (3) This Plan recognises that native title rights may increase during the term of this Plan.

Note. Increase in native title rights may occur as a result of the granting of native title rights under the *Commonwealth Native Titles Act 1993*.

- (4) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising native title rights through a repeat of the worst period of low inflows to these water sources represented in flow information held by the Department.

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- (5) To achieve subclause (4) sufficient volumes of water must be set aside from assured inflows into these water sources and in reserves held in Split Rock Dam water storage, Keepit Dam water storage or other water storages.

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Part 5 Bulk access regime

20 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in these water sources having regard to:
 - (a) the environmental water provisions established under Part 3 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 4 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 6 of this Plan.
- (3) The bulk access regime established under subclause (2):
 - (a) establishes rules according to which access licences are granted as provided for in Part 7 of this Plan,
 - (b) recognises and is consistent with the limits to the availability of water as provided for in Part 8 of this Plan,
 - (c) establishes rules according to which available water determinations are to be made as provided for in Part 8 of this Plan,
 - (d) recognises the effect of climatic variability on the availability of water as provided for in Part 8 of this Plan,
 - (e) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction of the availability of water as provided for in Part 8 of this Plan, and
 - (f) establishes rules according to which access licences are managed as provided for in Part 9 of this Plan.

Part 6 Requirements for water under access licences

21 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The following clauses in this Part represent the total volumes specified in the share components of access licences in these water sources. There is no commitment to make these volumes available. The actual volumes available at any time will depend on climate, access licence priority and the rules in this Plan.

22 Share component of domestic and stock access licences

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of domestic and stock licences authorised to extract water from the Upper Namoi Regulated River Water Source will total 46 megalitres.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of domestic and stock licences authorised to extract water from the Lower Namoi Regulated River Water Source will total 1,967 megalitres.

23 Share component of local water utility licences

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of local water utility licences authorised to extract water from the Upper Namoi Regulated River Water Source will total 150 megalitres.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of local water utility licences authorised to extract water from the Lower Namoi Regulated River Water Source will total 2,271 megalitres.

24 Share component of regulated river (high security) access licences

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (high security) access licences authorised to extract water from the Upper Namoi Regulated River Water Source will total 80 megalitres.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the volume of regulated river (high security) access licences authorised to extract water from the Lower Namoi Regulated River Water Source will total 3,418 megalitres.

25 Share component of regulated river (general security) access licences

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (general security) access licences authorised to extract water from the Upper Namoi Regulated River Water Source will total 9,729 megalitres.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the volume of regulated river (general security) access licences authorised to extract water from the Lower Namoi Regulated River Water Source will total 246,692 megalitres.

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26 Share component of supplementary water access licences

- (1) There shall be no supplementary water access licences authorised to extract water from the Upper Namoi Regulated River Water Source.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of supplementary water access licences authorised to extract water from the Lower Namoi Regulated River Water Source will total 110,000 megalitres.

27 Changes to total share component

This Plan recognises that total requirements for extraction under access licences in each access licence category may change during the term of this Plan as a result of:

- (a) the granting, surrender, cancellation or non renewal of access licences, or
- (b) variations to local water utility access licences arising from section 66 of the Act.

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Part 7 Rules for granting access licences

28 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act.
- (2) Access licences may be granted in these water sources subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in these water sources, other than for access licences of the following kinds:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) domestic and stock (domestic only) access licences, or
 - (c) an access licence resulting from an application of a type listed in section 82 (1) of the Act.
- (4) In applying for a new licence, the applicant must establish the purpose and circumstances relating to that access licence, and that the share component sought will be the minimum required to meet that purpose and circumstances.
- (5) Subclause (4) does not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.

Part 8 Limits to the availability of water

Division 1 Long-term extraction limit

29 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

30 Volume of the long-term extraction limit

- (1) This Plan establishes a long-term extraction limit for these water sources being the lesser of:
 - (a) the long-term average annual extraction from these water sources that would occur with the water storages and water use development that existed in 1999/2000, the share components existing at the commencement of this Plan and application of the water management rules defined in this Plan, or
 - (b) the long-term average annual extraction from these water sources that would occur under Cap baseline conditions.

Note. An assessment of the long-term average annual extractions that would occur under the conditions specified in subclause (1) (a) has been made using the Namoi IQQM run number 9078. This indicates a long-term average annual extraction volume of 238,000 megalitres.

Note. An assessment of the long-term average annual extractions that would result from the Cap baseline conditions in subclause (1) (b) has been made using the Namoi IQQM run number namo3414. This indicates a long-term average annual extraction volume of 256,000 megalitres.

Note. The long-term extraction limit recognises the effect of climatic variability on the availability of water, in accordance with section 20 (2) (c) of the Act, as historic climate and river flow information is used in its determination.
- (2) The values referred to in subclauses (1) (a) and (1) (b) shall be adjusted for any access licence dealing under section 71E of the Act.
- (3) For the purposes of establishing the long-term extraction limit and auditing compliance with it, the following shall be included:
 - (a) all water extractions by holders of all categories of access licences in accordance with the rules used for accounting of Cap diversions for Schedule F of the Murray Darling Basin Agreement,
 - (b) domestic and stock rights and native title rights extractions,
 - (c) volumes of water delivered as adaptive environmental water,
 - (d) floodplain harvesting extractions determined to be taken for use in conjunction with extractions from these water sources, and
 - (e) water allocations assigned from access licence water allocation accounts in these water sources to access licence water allocation accounts in any other water source.
- (4) For the purposes of establishing the long-term extraction limit and auditing compliance with it,
 - (a) the following shall not be included:
 - (i) replenishment flows made in accordance with this Plan, or

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(ii) diversion of water pursuant to the environmental health water rules and the supplementary environmental water rules in Part 3 of this Plan,

and

(b) the assessed volume of extractions shall be reduced by the volume of water allocations being assigned from the water allocation accounts of access licences in any other water source to the water allocation accounts of access licences in these water sources.

31 Assessment of the long-term extraction limit, the current long-term average annual extraction from these water sources and growth in water use by Tamworth City Council

- (1) Assessment of the long-term extraction limit and the current long-term average annual extraction from these water sources shall be carried out after the end of each water year, using the hydrologic computer model that, at the time, is approved by the Department for assessing long-term water extraction from these water sources.
- (2) To assess the long-term extraction limit, the model referred to in subclause (1) shall be set to represent as closely as possible the conditions referred to in clauses 30 (1) (a) and 30 (1) (b).
- (3) To assess the current long-term average annual extraction from these water sources, the model referred to in subclause (1) shall be set to represent as closely as possible all water use development, supply system management and other factors affecting the quantity of long-term average annual extraction from these water sources at the time of assessment.
- (4) An assessment shall also be carried out each year to determine the growth in extraction by Tamworth City Council.
- (5) Growth in extraction by Tamworth City Council for the purposes of this clause and clause 32 shall be the greater of:
 - (a) the current long-term average annual extraction from all surface water sources in the Namoi Water Management Area under the local water utility access licences or *Water Act 1912* licences held by Tamworth City Council minus the long-term average annual extraction by Tamworth City Council, under Cap baseline conditions, and
 - (b) zero.
- (6) Assessments under subclause (4) shall be carried out in accordance with procedures established by the Minister, but should be based on the results from a hydrologic computer model where this is possible.

32 Maintaining compliance with the long-term extraction limit

- (1) The current long-term average annual extraction from these water sources plus 95% of the growth in extraction by Tamworth City Council, determined in accordance with clause 31, may not be permitted to exceed the long-term extraction limit specified in clause 30.
- (2) Pursuant to subclause (1),

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- (a) if it has been assessed that the current long-term average annual extraction from these water sources plus 95% of growth in extraction by Tamworth City Council:
 - (i) exceeds the volume specified in clause 30 (1) (a) by 3% or more, or
 - (ii) exceeds the volume specified in clause 30 (1) (a) by more than half the difference between the volume specified in clause 30 (1) (a) and the volume specified in clause 30 (1) (b), or
 - (iii) exceeds the volume specified in clause 30 (1) (b),or
 - (b) if the assessments for 3 consecutive water years indicate that the current long-term average annual extraction from these water sources plus 95% of growth in extraction by Tamworth City Council exceeds the long-term extraction limit,
 - (c) then, the maximum available water determination made for supplementary water access licences under clause 39 shall be reduced, and
 - (d) once the maximum available water determination for supplementary water access licences has reduced to zero, the maximum sum of available water determinations to regulated river (general security) access licences in the Upper Namoi Regulated River Water Source under clause 38 (7) and the maximum volumes that may be taken or assigned from a regulated river (general security) access licences in the Lower Namoi Regulated River Water Source under clause 33 shall be reduced.
- (3) The degree of reduction under subclause (2) shall be that necessary to return long-term average annual extractions plus 95% of growth in extraction by Tamworth City Council to the long-term extraction limit.
- (4) Reductions in the percentages specified in clauses 33 (a), 33 (b) and 38 (7), pursuant to subclause (2), are to be of the same proportion.
- Note.** Subclause (4) means that if the percentage specified in clause 33(a) is reduced from say 125% to 100% (ie by one fifth), then the percentage specified in clause 33(b) is to be reduced from 300% to 240% (ie one fifth) and the percentage specified in clause 37(5) is to be reduced from 100% to 80% (ie one fifth).
- (5) If action has been taken under subclause (2), and a subsequent assessment under clause 31 indicates that the sum of the current long-term average annual extractions and 95% of any growth in extraction by Tamworth City Council is below the long-term extraction limit by more than 3%, then previous reductions under subclause (2) may be reversed to the degree that it is assessed necessary to return the sum to the long-term extraction limit.
- (6) Any reversal of previous reductions under subclause (5) shall:
 - (a) not exceed previous reductions made under subclause (2), and
 - (b) shall first reverse any previous reductions relating to regulated river (general security) access licences.
- (7) The assessment of the degree of any reduction required under subclause (2) or degree of any reversal under subclause (5) shall be made using the same computer model used to carry out assessments under clause 31.

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33 Limit to the volumes that may be taken under or assigned from regulated river (general security) access licences in the Lower Namoi Water Source.

The maximum volume that may be taken under, or assigned from, a regulated river (general security) access licence in the Lower Namoi Water Source:

- (a) during any water year shall be 125% of the share component of the access licence, or such lower percentage that may result from clause 32, plus the volume of water allocations assigned to the access licence from another access licence during that water year, and
- (b) during any 3 consecutive water years shall be 300% of the share component of the access licence, or such lower percentage that may result from clause 32, plus the volume of water allocations assigned to the access licence from another access licence during the 3 water years.

Division 2 Available water determinations

34 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) All available water determinations in these water sources shall be expressed as a percentage of the share component of each access licence in a licence category.

35 Available water determinations for domestic and stock access licences

- (1) The water supply system shall be managed so that available water determinations for domestic and stock access licences of 100% of share components can be maintained in each water source through a repeat of the worst period of low inflows into these water sources, as represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into these water sources and reserves held in Split Rock Dam and Keepit Dam water storages to provide for subclause (1).
- (3) The available water determinations for domestic and stock access licences in each water source made for the commencement of each water year shall be 100% of share components, whenever possible.
- (4) The sum of available water determinations made for domestic and stock access licences in each water source in any water year shall not exceed 100% of share components.
- (5) This Plan recognises that the water requirement of domestic and stock access licences in each water source may increase during the term of this Plan in accordance with clause 28.
- (6) The volumes of water set aside from assured inflows into these water sources and in reserves held in Split Rock Dam and Keepit Dam water storages shall be adjusted as required over the course of this Plan if necessary to do so to ensure that subclause (1) is satisfied.

36 Available water determinations for local water utility access licences

- (1) The water supply system shall be managed so that available water determinations for local water utility access licences of 100% of share components can be

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maintained in each water source through a repeat of the worst period of low inflows into these water sources, as represented in flow information held by the Department.

- (2) Sufficient volumes of water must be set aside from assured inflows into these water sources and reserves held in Split Rock Dam and Keepit Dam water storages to provide for subclause (1).
- (3) The available water determinations for local water utility access licences in each water source made for the commencement of each water year shall be 100% of share components whenever possible.
- (4) The sum of water determinations made for local water utility access licences in each water source in any water year shall not exceed 100% of share components.
- (5) This Plan recognises that the water requirement of local water utility access licences in each water source may increase during the term of this Plan in accordance with clause 28 and Part 2 Division 3 section 66 of the Act.
- (6) The volumes of water set aside from assured inflows into these water sources and in reserves held in Split Rock Dam and Keepit Dam water storages shall be adjusted as required over the course of this Plan if necessary to do so, to ensure subclause (1) is satisfied.

37 Available water determinations for regulated river (high security) access licences

- (1) The water supply system shall be managed so that available water determinations for regulated river (high security) access licences of 100% of share components can be maintained in each water source through a repeat of the worst period of low inflows into these water sources, as represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into these water sources and reserves held in Split Rock Dam and Keepit Dam water storages to provide for subclause (1).
- (3) The available water determinations for regulated river (high security) access licences in each water source made for the commencement of each water year shall provide an allocation of 100% of share components whenever possible.
- (4) If an available water determination made under subclause (3) is less than 100% of share components, then further assessments of available water shall be carried out and available water determinations made until the sum of allocations for the water year is equivalent to 100% of share components.
- (5) The sum of available water determinations for regulated river (high security) access licences in each water source in any water year shall not exceed 100% of share components.
- (6) Available water determinations made for regulated river (high security) access licences must take into account:
 - (a) the environmental water provisions established by this Plan,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,

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- (f) allocations remaining in access licence water allocation accounts from previous available water determinations,
- (g) water losses associated with the holding and delivery of water to meet the requirements specified in subclauses (a) to (f),
- (h) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
- (i) any other relevant matters.

38 Available water determinations for regulated river (general security) access licences

- (1) An available water determination is not to be made for regulated river (general security) access licences in either water source in any water year until the sum of available water determinations for regulated river (high security) access licences in both water sources for the water year is equivalent to 100% of share components.
- (2) Providing subclause (1) has been satisfied, an available water determination shall be made for the commencement of each water year and, as required during the course of each water year to, ensure that the sum of available water determinations to regulated river (general security) access licences in the Upper Namoi Regulated River Water source during the water year are equal to:
 - (a) 0% of share components, if the volume of water held in Split Rock Dam water storage has not been 5% or more of its full supply volume at any time during the water year, or
 - (b) 50% of share components, if the volume of water held in Split Rock Dam water storage has been 5% or more of its full supply volume at any time during the water year but not 8% or more of its full supply volume, or
 - (c) 60% of share components, if the volume of water held in Split Rock Dam water storage has been 8% or more of its full supply volume at any time during the water year but not 10% or more of its full supply volume, or
 - (d) the maximum percentage permissible under subclause (7) if the volume of water held in Split Rock Dam water storage has been 10% or more of its full supply volume at any time during the water year.
- (3) The Minister may, under section 42 (2) of the Act, vary the storage volumes specified in subclause (2) if:
 - (a) an increase in the requirements for water under regulated river (high security) access licences or other higher priority access licences in these water sources, or
 - (b) an increase in the requirements for water for extraction under regulated river (general security) access licences in the Upper Namoi Regulated River Water Source,

reduces the long-term reliability of water allocations that can be made for regulated river (general security) access licences in the Upper Namoi Regulated River Water Source below that existing at the commencement of this Plan.
- (4) Variations under subclause (3) shall be to the extent necessary to reinstate the long-term reliability of water allocations to regulated river (general security) access licences in the Upper Namoi Regulated River Water Source to that existing at the commencement of this Plan.

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- (5) The Minister may, under section 42 (2) of the Act, vary the storage capacity volumes specified in subclause (2) if the issue of new regulated river (general security) access licences in the Upper Namoi Regulated River Water Source mean that the allocations provided by the available water determinations required under subclause (2) could not be supplied at the storage capacity volumes specified in the subclause.
- (6) Variations under subclause (5) shall be to the extent necessary to permit the supply of the allocations provided by the required available water determinations.
- (7) The sum of available water determinations made for regulated river (general security) access licences in the Upper Namoi Regulated River Water Source shall not exceed 100% of share components, or such lower percentage as results from clause 32.
- (8) Whenever the sum of available water determinations made for regulated river (general security) access licences in the Upper Namoi Regulated River Water Source is equivalent to or less than 60% of share components then:
 - (a) uncontrolled flows may be extracted without debit to regulated river (general security) access licence accounts, subject to the rules specified in subclauses (b) and (c), and to authorisation by the Minister and the terms of that authorisation,
 - (b) the total amount of water that may be extracted without debit to the access licence water allocation account in any water year is limited to the lesser of:
 - (i) the difference between the sum of allocations to the regulated river (general security) access licence and the share component of the access licence, or
 - (ii) 50% of the share component of the access licence,
 - (c) if the total amount of water extracted exceeds the limits specified in subclause (b) then the regulated river (general security) access licence account shall be debited by a volume equivalent to the exceedance, and
 - (d) available water determinations shall refer to the provisions specified in subclauses (a), (b) and (c).
- (9) Providing subclause (1) has been satisfied, assessments of available water shall be made at least monthly, and available water determinations made for regulated (general security) access licences in the Lower Namoi Regulated River Water Source, if additional water can be provided to them.
- (10) Available water determinations under subclause (9) shall be based on the volume of water available after making provision for:
 - (a) the environmental water provisions established by this Plan,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) requirements for regulated river (high security) access licences,
 - (g) allocations remaining in access licence water allocation accounts from previous available water determinations;

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- (h) water losses associated with holding and delivery of water to meet the requirements identified in sub-clauses (a) to (g),
 - (i) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
 - (j) any other relevant matters.
- (11) Available water determinations under subclause (9) shall take into account any water in Split Rock Dam water storage exceeding that needed to provided for available water determinations in the Upper Namoi Regulated River Water Source in any water year when an available water determination in excess of 0% has been made for regulated river (general security) access licences in that water source.

39 Available water determinations for supplementary water access licences

- (1) An available water determination shall be made at the commencement of each water year and shall define the percentage of supplementary water access licence share component that can be taken in that year in the Lower Namoi Regulated River Water Source.
- (2) The available water determination made under subclause (1) shall not exceed 100% of share components, or such lower percentage that may result from clause 32 (2).

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Part 9 Rules for managing access licences

Division 1 General

40 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 20 (2) (e), 21 (a) and 21 (c) of the Act having regard to:

- (a) the environmental water rules established in Part 3 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 4 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 6 of this Plan.

Division 2 Water allocation account management

41 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in these water sources.

42 Accrual of water allocations

Water allocation shall be accrued into each access licence water allocation account in accordance with the available water determinations made for the category of the access licence in the relevant water source.

43 Volume taken under access licences

- (1) The water allocation taken under access licences in the Upper Namoi Regulated River Water Source shall be assessed as:
 - (a) the volume of water taken by the approved water supply works nominated by the access licence, or
 - (b) the greater of
 - (i) the volume of water extracted by the approved water supply works nominated by the access licence, or
 - (ii) the volume of water ordered for extraction by the approved water supply works nominated by the access licence,where the Minister has applied such a discretionary condition to the access licence.
- (2) The Minister should only apply a discretionary condition in relation to subclause (b) where this has been provided for in a compliance management strategy approved by the Minister.

Note. It is intended that the discretionary condition referred to above should only be applied where water orders have been exceeding the volume of water being taken under a licence and this cannot be explained by rainfall or other unavoidable factors.
- (3) Extraction of water in accordance with provisions of clause 38 (8) (a) and 38 (8) (b) shall not be debited from the access licence water allocation account.

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- (4) The water allocation taken under local water utility access licences, domestic and stock access licences, regulated river (high security) access licences and regulated river (general security) access licences in the Lower Namoi Regulated River Water Source shall be assessed as the greater of:
 - (a) the volume of water extracted by the approved water supply works nominated by the access licence, or
 - (b) the water ordered for extraction by the approved water supply works nominated by the access licence.
- (5) The water allocation taken under supplementary water access licences in the Lower Namoi Regulated River Water Source shall be assessed as the volume of water extracted, in accordance with announcements and access licence conditions, by the approved water supply works nominated by the access licence.

44 Accounting of assigned water allocations and return flows

- (1) Water allocations assigned from a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be debited from that water allocation account and water allocations assigned to a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be credited to that water allocation account.
- (2) Water allocations may also be recredited to access licence water allocation accounts under section 76 of the Act, in accordance with water return flow rules established under section 75 of the Act.

45 Carrying over of water allocation credits, water allocation account limits and debits for excess losses

- (1) Water allocation remaining in the water allocation accounts of access licences in the Upper Namoi Regulated River Water Source cannot be carried over from one water year to the next.
- (2) The following rules shall apply to the management of water allocation in the water allocation accounts of local water utility access licences, domestic and stock access licences and regulated river (high security) access licences in the Lower Namoi Regulated River Water Source:
 - (a) the maximum volume that may be held in the accounts at any time shall be 100% of their access licence share component, and
 - (b) water allocation remaining in the accounts cannot be carried over from one water year to the next.
- (3) The following rules shall apply to the management of water allocations in the water allocation accounts of regulated river (general security) access licences in the Lower Namoi Regulated River Water source:
 - (a) water allocation remaining in the accounts may be carried over from one water year to the next,
 - (b) the maximum volume that may be held in the accounts at any time shall be 200% of the access licence share component, and
 - (c) should the water provisions made in accordance with clauses 38 (10) (h) and 38 (10) (i) be expended then any further losses associated with the holding and delivery of water for all access licences in the water source shall be

debited to each regulated river (general security) access licence account in proportion to the volume held in the account.

- (4) Water allocation remaining in the water allocation accounts of supplementary water access licences in the Lower Namoi Regulated River Water Source cannot be carried over from one water year to the next.

Division 3 Extraction conditions

46 General priority of extractions

Where extraction components of access licences do not specify the rate as a share of supply capability or a volume per unit time, the following priority of extractions shall apply whenever supply capability is insufficient to satisfy all orders for water in any section of these water sources:

- (a) water shall be supplied to domestic and stock access licences, local water utility access licences and regulated river (high security) access licences that have placed orders for water, and
- (b) then any remaining supply capability shall be shared between regulated river (general security) access licences that have placed an order for water, in proportion to share components specified on the access licences.

47 Numerical specification of extraction components

- (1) As soon as possible after the commencement of this Plan, the Minister should amend the extraction components of access licences in Gunidgera Creek and Pian Creek downstream of the Gunidgera Creek Offtake (hereafter *the Gunidgera/Pian system*), in accordance with the mandatory conditions on the access licences.
- (2) Action under subclause (1) should be undertaken as follows:
 - (a) the form of the extraction component to regulated river (general security) access licences and their initial distribution should be determined by the Minister after taking into consideration the physical supply constraints within the Gunidgera/Pian system, the water distribution arrangements existing immediately prior to the commencement of this Plan and any other relevant matters, and
 - (b) the specified rate in the extraction component of each domestic and stock local water utility, and regulated river (high security) access licence should be sufficient to satisfy the maximum daily water needs.
- (3) At any time during the term of this Plan, the Minister may, in accordance with the mandatory conditions on access licences, amend the extraction components of access licences in either of these water sources, or in any section of either of these water sources, other than the Gunidgera/Pian system.
- (4) Action under subclause (3) should be undertaken as follows:
 - (a) the specified rate in the extraction component of each access licence should be a volume per unit of time or a share of supply capability,
 - (b) the specified rate in the extraction component of each domestic and stock local water utility, and regulated river (high security) access licence should be sufficient to satisfy the maximum daily water needs, and

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- (c) after satisfying subclause (b), the remaining supply capability should be distributed among regulated river (general security) access licences in proportion to the share component of each access licence.
- (5) When action under subclause (3) is undertaken, the Minister may also, in accordance with mandatory conditions on access licences, amend the extraction components of access licences in other sections of these water sources to exclude extractions in sections of the water source affected by the action under subclause (3).

48 Extraction of water in the Upper Namoi Regulated River Water Source under clause 38 (8) provisions

- (1) Authorisation of the extraction of water pursuant to the provisions of clause 38 (8) by regulated river (general security) access licences in the Upper Namoi Regulated River Water Source should only be given :
 - (a) for access licences nominating water supply works on the Manilla River downstream of Split Rock Dam, when the flow in the Manilla River at Brabri exceeds the flow needed to satisfy downstream water orders in the Upper Namoi Regulated River Water Source plus any flows resulting from releases made as part of a bulk transfer of water from Split Rock Dam water storage to Keepit Dam water storage, by 100 megalitres or more, and
 - (b) for access licences nominating water supply works on the Namoi River, when the flow in the Namoi River at Manilla Railway Bridge exceeds the flow needed to satisfy downstream water orders in the Upper Namoi Regulated River Water Source plus any flows resulting from releases made as part of a bulk transfer of water from Split Rock Dam water storage to Keepit Dam water storage, by 200 megalitres or more.
- (2) Authorisations by the Minister, pursuant to the provisions of clause 38 (8), should specify the maximum volume that may be extracted as a percentage of the access licence share component and the period in which the extraction may occur.
- (3) The Minister may, under section 42 (2) of the Act and by notice published in the Gazette,
 - (a) increase the flow exceedance specified in subclause (1) (a) if the installed pump capacity in the Manilla River downstream of Split Rock Dam increases by 20% or more, or
 - (b) increase the flow exceedance specified in subclause (1) (b) if the installed pump capacity in the Namoi River downstream to Keepit Dam water storage increases by 20% or more.
- (4) An increase under subclause (3) shall be in proportion to the increase in the installed pump capacity.

49 Taking of water under supplementary water licences in the Lower Namoi Regulated River Water Source

- (1) The taking of water under supplementary water access licences in the Lower Namoi Regulated River Water Source shall only be permitted in accordance with announcements made by the Minister.
- (2) The maximum volume of water that may be taken under supplementary water access licences during each period of time to which an announcement applies shall

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be expressed as a percentage of each supplementary water access licence share component.

- (3) Taking of water under supplementary water access licences should be managed, as far as possible, to evenly share access opportunity amongst all supplementary water access licences.
- (4) Taking of water under supplementary water access licences should only be permitted:
 - (a) from uncontrolled flows,
 - (b) when flows are in excess of those required to provide replenishment requirements as specified in clause 60, and
 - (c) in accordance with the rules set out in this clause.
- (5) Taking of water under supplementary water access licences in the Lower Namoi Regulated River Water Source shall not be permitted, or shall be restricted, when this is required to ensure outflows from the Lower Namoi Regulated River Water Source contribute to meeting the requirements of the Interim Unregulated Flow Management Plan for the North West.

Note. The Interim Unregulated Flow Management Plan for the North West is also known as the North-West Unregulated Flow Management Plan.

Note. The Namoi is one of a number of Barwon-Darling tributary rivers covered by the Interim Unregulated Flow Management Plan for the North West. Flow targets in the Barwon-Darling specified under that Plan may, at times, be met by flows coming from other rivers or may require contributions of flow from several rivers.

- (6) The requirements of the Interim Unregulated Flow Management Plan for the North West are:
 - (a) a flow of 14,000 megalitres per day (hereafter *ML/day*) in the Darling River at Brewarrina for 5 consecutive days, or 10,000 ML/d in the Darling River at Bourke for 5 consecutive days, during the period September to February inclusive, providing two such flow events have not already occurred during that period in that water year,

Note. This subclause is intended to provide opportunity for the passage of fish across the major weirs in the Barwon-Darling.

- (b) a flow of 2,000 ML/day in the Darling River at Wilcannia for 5 consecutive days during October to April, inclusive, providing flows of this quantity have not already been reached during the preceding three months within October to April period, and

Note. This subclause is intended to protect flows needed to suppress blue-green algae blooms.

- (c) a flow of:
 - (i) 150 ML/day in the Darling River at Wilcannia,
 - (ii) 280 ML/day in the Darling River at Louth,
 - (iii) 390 ML/day at in the Darling River at Bourke,
 - (iv) 550 ML/day at in the Darling River at Brewarrina, and
 - (v) 700 ML/day in the Barwon River at Walgett,

Note. This subclause is intended to protect flows needed to meet basic landholder rights requirements in the Barwon-Darling.

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- (7) The Minister may under section 42(2) of the Act and by notice published in the Gazette alter or replace the rule set out in subclause (5) or the requirements set out under subclause (6) should the Interim Unregulated Flow Management Plan for the North West be altered, or replaced by new management arrangements.
- (8) Any action under subclause (7) must:
- only affect the taking of water under supplementary water access licences,
 - only relate to ensuring the taking of water under supplementary water access licences does not jeopardise critical environmental needs or the supply of water to basic rights holders, domestic and stock access licence holders and local water utility access licence holders, in the Barwon Darling, and
 - in the Minister's opinion, not substantially alter the long-term average volume of water that can be taken under supplementary water access licences in the Lower Namoi Regulated River Water Source.
- (9) The supplementary water event start flow and supplementary water event finish flow at Narrabri for the purposes of following subclauses shall be:
- 500 ML/day when the total volume of water allocations in regulated river (general security) access licence accounts is less than or equal to 90,000 megalitres, and
 - those specified in the following table, when the total volume of water allocations in regulated river (general security) access licence accounts is greater than 90,000 megalitres:

Date	Supplementary water event start flow (ML/day)	Supplementary water event finish flow (ML/day)	As measured at
1 August–31 December	5,000	3,000	Narrabri Creek at Narrabri plus Namoi River at Narrabri
1 January–31 January	4,000	2,000	Narrabri Creek at Narrabri plus Namoi River at Narrabri
1 February–31 July	2,000	1,000	Narrabri Creek at Narrabri plus Namoi River at Narrabri

- (10) The supplementary water event start flow and supplementary water event finish flow at locations downstream of Narrabri for the purposes of following subclauses shall be:
- 500 ML/day when the total volume of water allocations in regulated river (general security) access licence accounts is less than or equal to 90,000 megalitres, and
 - those specified in the following table, when the total volume of water allocations in regulated river (general security) access licence accounts is greater than 90,000 megalitres:

Date	Supplementary water event start flow (ML/day)	Supplementary water event finish flow (ML/day)	As measured at
1 August–31 December	5,000	3,000	Namoi River at Mollee
	4,000	2500	Namoi River at Gunidgera Weir
	3,000	2000	

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			Namoi River at Weeta Weir
1 January–31 January	4,000	2,000	Namoi River at Mollee
	3,000	2,000	Namoi River at Gunidgera Weir
	2,000	1,500	Namoi at River Weeta Weir
1 February–31 July	2,000	1,000	Namoi River at Mollee
	2,000	1,000	Namoi River at Gunidgera Weir
	1,500	1,000	Namoi River at Weeta Weir

Note. Subclauses (11) and (12) deal with the calculation of the volume that can be taken during a supplementary water event. Subclauses (13) to (17) deal with when extractions can commence and when they must cease in sections of the Lower Namoi Regulated River Water Source.

Note. Definitions of *uncontrolled flow* and *supplementary water event* are in Schedule 1 of this Plan.

- (11) The volume of water that may be made available for extraction under supplementary water access licences in the Lower Namoi Regulated River Water Source during each supplementary water event should not exceed:
- (a) 10% of the supplementary event volume occurring between 1 July and 31 October during the supplementary water event, and
 - (b) 50% of the supplementary event volume occurring between 1 November and 30 June during the supplementary water event.
- (12) The supplementary event volume for the purposes of subclause (11) shall be the sum of :
- (a) the volume of uncontrolled flows in the river upstream of Narrabri arising from water which entered :
 - (i) after the flows upstream of Narrabri have increased to a rate sufficient to provide an uncontrolled flow at Narrabri equal to the relevant supplementary water event start flow in subclause (9), and
 - (ii) before the flow upstream of Narrabri has decreased to a rate which is no longer sufficient to provide an uncontrolled flow at Narrabri equal to the relevant supplementary water event finish flows in subclause (9),

and
 - (b) the volume of uncontrolled flows arising from water which enters the Lower Namoi Regulated River Water Source downstream of Narrabri and upstream of Weeta Weir, providing that the volume is from water that entered :
 - (i) after the flow upstream of the site nominated in subclause (10) had increased to a rate sufficient to provide an uncontrolled flow at the site equal to the relevant supplementary water event start flow in subclause (10), and
 - (ii) before the flow upstream of the site in subclause (i) had decreased to a rate which was no longer sufficient to provide an uncontrolled flow at the site equal to the relevant supplementary water event finish flow in subclause (10),

and

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- (c) the volume of uncontrolled flows arising from water which enters the Lower Namoi Regulated River Water Source downstream Weeta Weir providing that the volume is from water that entered after uncontrolled flows had increased to a rate sufficient to:
- (i) ensure a flow of 200 ML/day for 5 days would be achieved in the Namoi River at Walgett, when the total volume of water allocations in regulated river (general security) access licence accounts is greater than 90,000 megalitres, or
 - (ii) ensure a flow of 10 ML/day, when the total volume of water allocations in regulated river (general security) access licence accounts is less than 90,000 megalitres.
- (13) The taking of water under supplementary water access licences nominating water supply works upstream of the Namoi River at Narrabri :
- (a) should not commence until the flows upstream of Narrabri have increased to a rate sufficient to provide an uncontrolled flow at Narrabri equal to the relevant supplementary water event start flow in subclause (9), and
 - (b) should cease when the flows upstream of Narrabri have decreased to a rate which was no longer sufficient to provide the an uncontrolled flow at Narrabri equal to the relevant supplementary water event finish flows in subclause (9).
- (14) When all uncontrolled flows are arising from inflows to the water source upstream of Narrabri, the taking of water under supplementary water access licences nominating water supply works downstream of the Namoi River at Narrabri :
- (a) should not be permitted until “X” days after the uncontrolled flow in the Namoi River at Narrabri has increased to a rate equal to the relevant supplementary water event start flow in subclause (9), and
 - (b) should cease “X” days after the uncontrolled flow in the Namoi River at Narrabri has decreased to a rate equal to the relevant supplementary water event finish flows set out in subclause(9).
- where “X” is the time of travel in days between Narrabri and the location of the water supply works.
- (15) When uncontrolled flows are arising from inflows to the water source downstream of Narrabri and upstream of Weeta Weir, the taking of water under supplementary water access licences nominating water supply works downstream of the Namoi River at Narrabri:
- (a) may be permitted “Y” days after the uncontrolled flow at a site nominated in subclause (10) has increased to a rate equal to the relevant supplementary water event start flow in subclause (10), and
 - (b) may continue until “Y” days after the uncontrolled flow at the site in subclause (a) has decreased to a rate equal to the relevant supplementary water event finish flows set out in subclause(10).
- where “Y” is the time of travel in days between the site in subclause (a) and the location of the water supply works.
- (16) When uncontrolled flows are arising from inflows to the Lower Namoi Regulated River Water Source downstream of Weeta Weir, the taking of water under supplementary water access licences nominating water supply works downstream

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of the Weeta Weir may be permitted after uncontrolled flows have increased to a rate sufficient to:

- (iii) ensure a flow of 200 ML/day for 5 days would be achieved in the Namoi River at Walgett, when the total volume of water allocations in regulated river (general security) access licence accounts is greater than 90,000 megalitres, or
 - (iv) ensure a flow of 10 ML/day, when the total volume of water allocations in regulated river (general security) access licence accounts is less than 90,000 megalitres.
- (17) Taking of water under supplementary water access licences nominating water supply works on Gunidgera/Pian system shall be managed so that the flow passing Dundee Weir during the period when the taking of water is permitted is the lesser of:
- (a) 100 ML/day, or
 - (b) the inflows entering the Gunidgera/Pian system as a result of rainfall on its catchment downstream of the Gunidgera Creek offtake.

Note. Taking of water on the Gunidgera/Pian system must not result in subclause (11) or other relevant subclauses being breached. Subclause (17) is an additional provision affecting taking of water on the Gunidgera/Pian system.

Note. Regardless of any announcement permitting supplementary water access, any water orders in the system will be debited against the regulated river (general security) account on release from the Dam as indicated in clause 43 (4). Failure to extract ordered water in the system and the taking of supplementary water instead will result in a debit to the regulated river (general security) account and recording of use against the supplementary water access licence.

Part 10 Access licence dealing rules

50 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

Note. The access licence dealing principles referred to in (1) are contained in Appendix 5.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. Access licence dealings include changes of licence ownership, conversions of licence category, movement of share component from one access licence to another access licence, movement of water allocation from one access licence allocation account to another access licence allocation account and changes in the location of water supply that can take water available under the licence. These dealings must comply with the provisions of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

51 Rules relating to constraints within this water source

- (1) This clause relates to dealings under sections 71B, 71D, 71G, and 71J of the Act.
- (2) Any dealing that would result in an increase in the total share components of regulated river (high security) access licences nominating water supply works downstream of the Namoi River at Mollee Weir is prohibited.
- (3) Until extraction components for access licences in the Gunidgera/Pian system have been amended in accordance with clause 47, a dealing is prohibited if it would result in:
 - (a) the total volume of share components of domestic and stock access licenses, regulated river (high security) access licences and regulated river (general security) access licences nominating water supply works on the Gunidgera/Pian system exceeding the total volume at the commencement of this Plan, or
 - (b) the total volume of water allocations assigned to access licences, other than supplementary water access licences, nominating water supply works on the Gunidgera/Pian system during a water year exceeding the total volume of water allocations assigned from access licences, other than supplementary water licences, nominating water supply works in the Gunidgera/Pian system to access licences nominating water supply works not on the Gunidgera/Pian system during the water year.
- (4) A dealing is prohibited if it would result in:
 - (a) the total volume of share components of supplementary water access licence nominating water supply works in the Gunidgera/Pian Creek system exceeding the total volume at the commencement of this Plan, or
 - (b) the total volume of water allocations assigned to supplementary water access licences, nominating water supply works on the Gunidgera/Pian system

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during a water year exceeding the total volume of water allocations assigned from supplementary water licences, nominating water supply works in the Gunidgera/Pian system to access licences nominating water supply works not on the Gunidgera/Pian system during the water year.

- (5) Assignment of water allocations from a supplementary water access licence water allocation account to an access licence of any other access licence category is prohibited.
- (6) Assignment of water allocations to a supplementary water access licence water allocation account from an access licence of any other access licence category is prohibited.

52 Rules for change of water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been effected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.

- (2) Access licences in other water sources outside of these water sources may be issued following cancellation of access licences in either of these water sources only if:
 - (a) the access licence dealing rules in the receiving water source permit such a dealing, and
 - (b) a conversion factor, established by the Minister and published in an order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, has been applied.
- (3) Access licences in either of these water sources may be issued following cancellation of access licences in a water source outside of these water sources only if:
 - (a) the access licence dealing rules in the other water source permit such a dealing, and
 - (b) a conversion factor, established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in these water sources, has been applied.

Note. The access licence dealing principles gazetted on 27 December 2002 prohibit a change of water source dealing where the movement is from an unregulated river water source to a regulated river water source.
- (4) An access licence in one of these water sources may be issued following cancellation of an access licence in the other of these water sources.
- (5) The share component volume of a new access licence issued in accordance with subclause (4) is to be equal to the share component volume of the cancelled access licence.

53 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category is prohibited except as provided for under this clause.

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- (3) On application of the access licence holder, the Minister may cancel a regulated river (general security) access licence, and issue a regulated river (high security) access licence, subject to:
- (a) the application of a conversion factor established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in these water sources, and
 - (b) the volume of water in the regulated river (general security) access licence water allocation account being equal to or greater than its share component volume.

Note. The volume of water in the regulated river (general security) access licence water allocation account which is in excess of the share component volume of the new regulated river (high security) access licence will not be credited to the new regulated river (high security) access licence account.

Note. Clause 51 constraints apply to conversions also. This means that conversion of regulated river (general security) access licences to regulated river (high security) access licences cannot occur if the resulting high security licence would nominate works downstream of the Namoi River at Mollee Weir.

- (4) On application of the access licence holder, the Minister may cancel a regulated river (high security) access licence, and issue a regulated river (general security) access licence, subject to:
- (a) the application of a conversion factor equal to one divided by the conversion factor established in subclause (3), and
 - (b) the total volume of regulated river (general security) access licence share components not increasing above the total volume of regulated river (general security) access licence share components at the time of commencement of Part 2 of Chapter 3 of the Act.

Note. This would allow conversion of a regulated river (high security) access licence to a regulated river (general security) access licence only if there had been a corresponding or larger volume of regulated river (general security) access licence share component converted to regulated river (high security) access licence.

54 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Access licence equivalents in other States may not be transferred into these water sources.
- (3) Access licences in these water sources may not be transferred into another State.

55 Rules for water allocation assignment between water sources

- (1) This clause relates to dealings under section 71G of the Act in relation to water allocation assignments between water sources.

Note. Rules in clause 51 also apply to such assignments.

- (2) Water allocations may be assigned from the water allocation account of an access licence in one of these water sources to the water allocation account of an access licence in the other of these water sources subject to subclauses (3) and (4).
- (3) Water allocations should not be assigned from the water allocation account of an access licence in the Upper Namoi Regulated River Water Source to the water allocation account of an access licence in the Lower Namoi Regulated River Water

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Source if there is a significant risk that the rate at which water can be released from Keepit Dam water storage during the remainder of the water year will be insufficient to meet likely water orders.

Note. The maximum rate of water release from Keepit Dam water storage is severely reduced when water storage levels are low.

- (4) The assignment of water allocations from access licences in the Lower Namoi Regulated River Water Source to access licences in the Upper Namoi Regulated River Water Source is prohibited unless:
 - (a) the sum of available water determinations made for regulated river (general security) access licences in the Upper Namoi Regulated River Water source during the water year is equal to the maximum percentage permissible under clause 38, and
 - (b) there is sufficient water available in Split Rock Dam water storage to supply the assigned water allocations.
- (5) Water allocations from the water allocation account of an access licence in these water sources may not be assigned to the water allocation account of an access licence in any other water source.
- (6) Water allocations from the water allocation account of an access licence in any other water source may not be assigned to the water allocation account of an access licence in these water sources.

56 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Water allocation equivalents from other States may not be assigned to the water allocation accounts of access licences in this water source.
- (3) Water allocations from the water allocation accounts of access licences in this water source may not be assigned to water allocation equivalents in other States.

Part 11 Mandatory conditions

57 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
Note. The Minister may impose discretionary conditions at any time on an access licence in accordance with section 66 (1) (b) of the Act.
- (2) All access licences in these water sources shall have mandatory conditions to give effect to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence,
 - (c) the requirement that extraction under the access licence shall be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence shall be subject to the water allocation account management rules established in Part 9 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence may only occur if the resulting debit to the access licence account will not exceed the volume of water allocation remaining in the licence account,
 - (f) the requirement that water may only be taken by water supply works nominated on the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.
- (3) All access licences shall have a mandatory condition that facilitates the provisions of clause 47 of this Plan.
- (4) All domestic and stock access licences, local water utility access licences and regulated river (high security) access licences shall have mandatory conditions that only allow the taking of water if it has been ordered in accordance with procedures established by the Minister.
- (5) All regulated river (general security) access licences in the Upper Namoi Regulated River Water Source shall have mandatory conditions that only allow the taking of water if it has been ordered in accordance with procedures established by the Minister, except in relation to water extracted under the provisions of clause 38 (8).
- (6) All regulated river (general security) access licences in the Lower Namoi Regulated River Water Source shall have mandatory conditions:
 - (a) that only allow the taking of water if it has been ordered in accordance with procedures established by the Minister, and
 - (b) to give effect to the provisions of clause 33 of this Plan.
- (7) All supplementary water access licences shall have mandatory conditions that only allow the taking of water in accordance with announcements, as specified in clause 49, and after satisfying any procedures established by the Minister,
- (8) All domestic and stock access licences, other than domestic and stock (domestic only) access licences shall have mandatory conditions that only allow the taking of

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water for the purpose of domestic consumption or stock watering as defined in section 52 of the Act.

- (9) All domestic and stock (domestic only) access licences shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption as defined in section 52 of the Act.
- (10) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act.

58 Mandatory conditions on water supply works approvals

All approvals for water supply works in these water sources shall have mandatory conditions to give effect to the following:

- (a) flow measurement devices shall be installed and maintained on all works used for extraction of water under an access licence and shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
- (b) water extraction, property water management infrastructure and cropping details shall be provided on request, in the form and in accordance with procedures established by the Minister, and
- (c) the taking of water may only occur in accordance with the conditions applying to the access licence from whose water allocation account the taking of water will be debited.

Part 12 System operation rules

59 System operation rules

This Part is made in accordance with section 21 (e) of the Act.

60 Replenishment flows

- (1) Replenishment flows of up to a total volume of 14,000 megalitres in any water year shall be provided to Pian Creek downstream of Dundee Weir if required.
- (2) Sufficient volumes of water must be set aside from assured inflows into these water sources and in reserves held in Split Rock Dam water storage, Keepit Dam water storage or other water storages to provide for subclause (1).

61 Water delivery and channel capacity constraints

Where necessary for determining extraction rights, managing water releases or providing water under access licences, the maximum water delivery or operating channel capacity shall be determined and specified in accordance with procedures established by the Minister, taking into account:

- (a) inundation of private land or interference with access,
- (b) the effects of inundation on the floodplain and associated wetlands,
- (c) the transmission losses expected to occur,
- (d) capacities of water management structures controlled by the Minister, and
- (e) the SWMOP targets.

Note. The following capacities have been assessed:

- Pian Creek channel downstream from Gunidgera offtake has a capacity of 2,000 ML/day – 80% being 1,600 ML/day, and
- Gunidgera offtake, which regulates flows into Pian Creek has a capacity of 1,250 ML/day.

62 Rates of change to releases from water storages

Rules regarding rates of change to releases from water storages should be specified in accordance with procedures established by the Minister, and should take into account:

- (a) relevant environmental considerations,
- (b) damage to river banks, and
- (c) public safety.

63 Bulk transfer rules between storages

- (1) Any bulk transfer of water from Split Rock Dam water storage to Keepit Dam water storage should be carried out in a manner that minimises adverse environmental impacts.
- (2) Prior to making any bulk transfer from Split Rock Dam water storage to Keepit Dam water storage the Minister should:

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- (a) determine an appropriate pattern of release from Split Rock Dam, taking into consideration the volume and time requirements of the bulk transfer and the need to minimise downstream environmental impacts,
- (b) consult with water users on the upper Namoi and Manilla Rivers regarding the pattern of release,
- (c) provide a minimum of 14 days notice of the intended release to water users between Split Rock Dam and Keepit Dam water storage,
- (d) conduct appropriate monitoring, and
- (e) advise the community regarding the intended water releases through media releases.

Note. Bulk transfer releases from Split Rock Dam water storage can have significant impacts on farming operations and the river environment.

64 Supply of orders when remaining allocations are low

- (1) If, in the opinion of the Minister, the total remaining volume of water in access licence allocation accounts has reduced to a level where the continuous delivery of water orders would involve unacceptably high delivery losses, water orders may be grouped and released periodically.
- (2) The Minister should seek advice from irrigation industry representatives regarding the circumstances under which action under subclause (1) should be taken and the manner of management.

65 Dam operation during floods and spills

- (1) The operation of Keepit Dam during times of flood and spilling of water is to be undertaken in a manner that maintains the safety of dam infrastructure.
- (2) Providing it is consistent with subclause (1), operation :
 - (a) should leave the storage at full supply level at the completion of the flood or spilling of water,
 - (b) during floods should ensure the general rate of increase of outflow from the water storage does not exceed the rate of increase of inflow to the water storage, and
 - (c) should aim to lessen downstream flood damage, where possible.

Note. Split Rock Dam has a free overflow spillway and as such there are no flood operation procedures.

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Part 13 Monitoring and reporting

66 Monitoring

The monitoring of the performance indicators specified in clause 12 of this Plan shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act. Any improvements to environmental outcomes and water supply delivery resulting from the completion of remedial works to Keepit Dam may be relevant to this review.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with the water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51(5) of the Act, the Implementation Program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program are included in the annual report for the Department.

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Part 14 Amendment of this Plan

67 Changes to these water source

The Minister, under section 42 (2) of the Act and by notice published in the Gazette, may add a river or section of river to one of these water sources or remove a river or section of river from one of these water sources providing that:

- (a) any river or section of river that is added has been declared to be a regulated river by an order published in the Gazette, and
- (b) the Minister is satisfied that there will be no impact on environmental water, or on the water available to any access licences in these water sources.

68 Other amendments of this Plan

The Minister, under section 42 (2) of the Act and by notice published in the Gazette amend this Plan in accordance with the following clauses:

- (a) clause 38 in respect the specified storage capacity volumes relating to available water determinations made for regulated river (general security) access licences in the Upper Namoi Regulated River Water Source,
- (b) clause 48 in respect to flow exceedances required for authorisation of extraction of water by regulated river (general security) access licences in the Upper Namoi Regulated River Water Source pursuant to the provisions of clause 38 (8), and
- (c) clause 49 (7) in respect to in respect to the requirements or arrangements affecting taking of water under supplementary water access licences in the Lower Namoi Regulated River Water Source.

Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

airspace is a volume in a ***water storage***, which is kept empty for the purpose of mitigating potential floods.

assured inflows are the volumes of water which historic hydrologic information indicates are the minimum which can be expected to flow into the water source.

available water in relation to a water management area or water source, is the water that is available in that area or water source in accordance with an ***available water determination*** that is in force in respect of that area or water source.

available water determination is a written order by the Minister as to the availability of water for the various categories of access licence in relation to a specified water management area or water source.

Department is the Department of Land and Water Conservation or its successor.

bulk transfer is the release of water from an upstream water storage for the purpose of supplementing the volume of water held in a downstream water storage, generally so that the downstream storage can maintain releases necessary to meet downstream water requirements in times of drought.

the ***Cap*** is as defined in Schedule F of the Murray Darling Basin Agreement.

Cap baseline conditions are those used for assessment of Cap in Schedule F of the Murray Darling Basin Agreement and relate to the level of water resource development at June 1994.

conversion factor refers to the adjustment factor that may be applied to the size of share components when they are part of a dealing under 71B or 71E of the Act.

extraction component is the extraction component of an access licence as defined in 56(1) of the Act.

floodplain harvesting is the collection or capture of water flowing across floodplains.

full supply volume is the volume of water held in a ***water storage*** at the ***full supply level***

full supply level is the storage level considered to be the limit for the purposes of storage of water, except in periods of flood operation.

long-term average annual extraction is the average of annual water extractions from the water source over the period for which an assessment is carried out.

Minister is the Minister for Land and Water Conservation. The Minister may delegate functions under section 389 of the Act.

natural 95th percentile daily flow for each month is the computer model generated daily flow that is exceeded in 95% of days over the entire modelled period in each of the 12

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calendar months, using the hydrologic computer model that, at the time, is approved for determining natural flows (ie river flows without water storages or water extractions) in these water sources.

Murray Darling Basin Agreement is the agreement between the Commonwealth of Australia and the states of New South Wales, Victoria and South Australia as referred to in the *Murray Darling Basin Act, 1992*, for the purpose of promoting and co-ordinating effective planning and management for the equitable, efficient and sustainable use of the water, land and other environmental resources of the Murray-Darling Basin.

replenishment flows are flows provided to refill pools and water holes in effluent river systems downstream of the water source and provide water for household and town use and stock.

reserves are volumes of water put aside in a ***water storage*** to allow the supply of future water requirements.

share component is the share component of an access licence as defined in 56(1) of the Act and, for the purposes of this Plan, any right to take water under the Water Act 1912 that gives rise to share component of an access licence under the Water Management Act 2000 (as amended).

supplementary water event is a continuous period during which the taking of water under supplementary water access licences is being permitted in all or part of the Lower Namoi Regulated River Water Source

supply capability is defined as the rate at which water that can be supplied to a section of a water source after satisfying the environmental water provisions and the requirements for water to satisfy basic land holder rights.

uncontrolled flow is flow, in excess of that needed to meet the environmental provisions of this Plan, basic landholder rights and water orders placed by regulated river (general security) access licences and higher priority access licences in a water source.

water storage means a state owned dam, weir or other structure, which is used to regulate and manage river flows in this water source and the water body impounded by this structure.

water supply system includes the water storages and all other factors influencing water supply that are under the control of the Minister.

water use development includes all privately owned water management structures, and all aspects of farm, industry, town or private household development which affect the volumes of water taken from these water sources, and the management practices that are applied in relation to them.

water year is a 12 month period 1 July to 30 June

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Schedule 2 Contribution to relevant targets in December 2002 SWMOP

Levels of assessed contribution:

FULL	contributes to target in full
HIGH	while not fully contributing to target, there is a good level of contribution
PARTIAL	goes some way to contributing to the target
LOW	only small degree of contribution to target

Relevant SWMOP Target	Level of Contribution	Comments
Target 1a Extractions in Murray Darling Basin's regulated rivers limited to the level of the long-term average annual extraction below the Murray Darling Basin Ministerial Council (MDBMC) Cap which results from the long-term impact of the environmental water rules.	FULL	<ul style="list-style-type: none"> This Plan clearly sets out the basis for the long-term extraction limit in Part 8.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon.	FULL	<ul style="list-style-type: none"> Rules set out in Part 8.
Target 2 All water management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes.	PARTIAL	<ul style="list-style-type: none"> This Plan improves moderate to high flows compared to Cap but low to median flows have not been improved. 3 fish species occurring in the Namoi have been listed as threatened (Purple-spotted gudgeon, olive perchlet, silver perch) which may be assisted by improvement in high flows, however low flows are critical to these species and this Plan will not assist in this respect.
Target 4a Where the frequency of "end of system" daily flows would be less than 60 percent of the predevelopment level without environmental water rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent of the predevelopment frequency.	FULL	<ul style="list-style-type: none"> The frequency of flows between the 10th and 90th percentiles have been met.
Target 4b Frequency of "end of system" daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95 th percentile.	PARTIAL	<ul style="list-style-type: none"> The current computer model for the Namoi River system is not able to accurately assess the occurrence of end of system flows as low as the predevelopment 95th percentile (about 14 ML/day). The pre-Plan management rules for the Namoi did not provide a specific daily end of system flow target. This Plan includes an end of system target for the months of June, July, and August, which is equivalent to 75% of the natural 95th percentile flow.

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Relevant SWMOP Target	Level of Contribution	Comments
<p>Target 4c The channel capacity of all lower river and effluent creek systems used for the delivery of regulated water determined. Subject to reasonable socio-economic impacts, limits on daily supply volumes established for effluent systems such that they do not exceed 80 percent of the channel capacity for more than 10 percent of days in each month of each year. Where daily supply volumes are currently substantially less than channel capacity, alternative limits established to reduce the impact of unseasonal flows arising from future access licence dealings.</p>	PARTIAL	<ul style="list-style-type: none"> • This Plan provides for the determination of maximum operating channel capacities, in accordance with the SWMOP target. • This Plan also provides for the distribution of numerical extraction rights that could be used to facilitate management to desired capacity targets. • This Plan also notes a number of maximum channel capacity constraints for Pian Creek and Gunidgera off-take at the commencement of this Plan. However these are only expressed as a note and are therefore not actually part of this Plan.
<p>Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components.</p>	FULL	<ul style="list-style-type: none"> • Access for existing regulated supply licences and supplementary water access licences are specified and tradeable.
<p>Target 9a Flow thresholds for declaration of supplementary water access, which take into account environmental needs, clearly specified.</p>	FULL	<ul style="list-style-type: none"> • This Plan specifies rules for access in Part 9.
<p>Target 9b Annual limits on supplementary water extractions, consistent with the long-term average annual extraction limits, established in all regulated river water sources.</p>	FULL	<ul style="list-style-type: none"> • This Plan sets the maximum annual extraction for supplementary access licences at the full entitlement of 110,000 megalitres.
<p>Target 9c Rules for sharing between supplementary water licence holders made explicit.</p>	PARTIAL	<ul style="list-style-type: none"> • This Plan does not clearly specify any sharing rules however it does provide for “evenly sharing” access between supplementary water access licences.
<p>Target 9d Supplementary access licence dealings made possible in regulated river water sources, subject to extraction limits and environmental assessment and Aboriginal spiritual and cultural constraints.</p>	HIGH	<ul style="list-style-type: none"> • Trading of supplementary access water is permitted
<p>Target 12 Supplementary access licence dealings made possible in regulated river water sources, subject to extraction limits and environmental assessment and Aboriginal spiritual and cultural constraints.</p>	FULL	<ul style="list-style-type: none"> • Obligations are set out in Part 5
<p>Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them.</p>	PARTIAL	<ul style="list-style-type: none"> • The supporting documentation in the publicly exhibited plan identified the ecosystems that are of particular importance to Aboriginal people. • This Plan would be expected to provide benefits to some elements these ecosystems.
<p>Target 16a All share components of access licences tradeable.</p>	HIGH	<ul style="list-style-type: none"> • All entitlements (including supplementary water) will be tradeable

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Relevant SWMOP Target	Level of Contribution	Comments
		under this Plan, however some restrictions will apply.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water.	FULL	<ul style="list-style-type: none"> Trading between water sources are in line with Government policy.
Target 16d Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery	FULL	<ul style="list-style-type: none"> This Plan does not impose reduction factors.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit.	PARTIAL	<ul style="list-style-type: none"> This Plan establishes some water transfer zones with transfer restrictions applying to them.
Target 35 All water management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current ANZEC Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries.	LOW	<ul style="list-style-type: none"> This Plan includes a water quality objective. However, it is doubtful this Plan will deliver any significant water quality improvements.

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Appendix 1 Rivers and lakes in these water sources

At the commencement of this Plan the *Upper Namoi Regulated River Water Source* includes the following:

- (i) Manilla River from the upper limit of the Split Rock Dam storage, downstream to its junction with the Namoi River, including all tributaries to the storage (named and unnamed) up to the high water mark of the storage, and
- (ii) Namoi River from its junction with the Manilla River to the upper limit of the storage of Keepit Dam.

At the commencement of this Plan the *Lower Namoi Regulated River Water Source* includes the following:

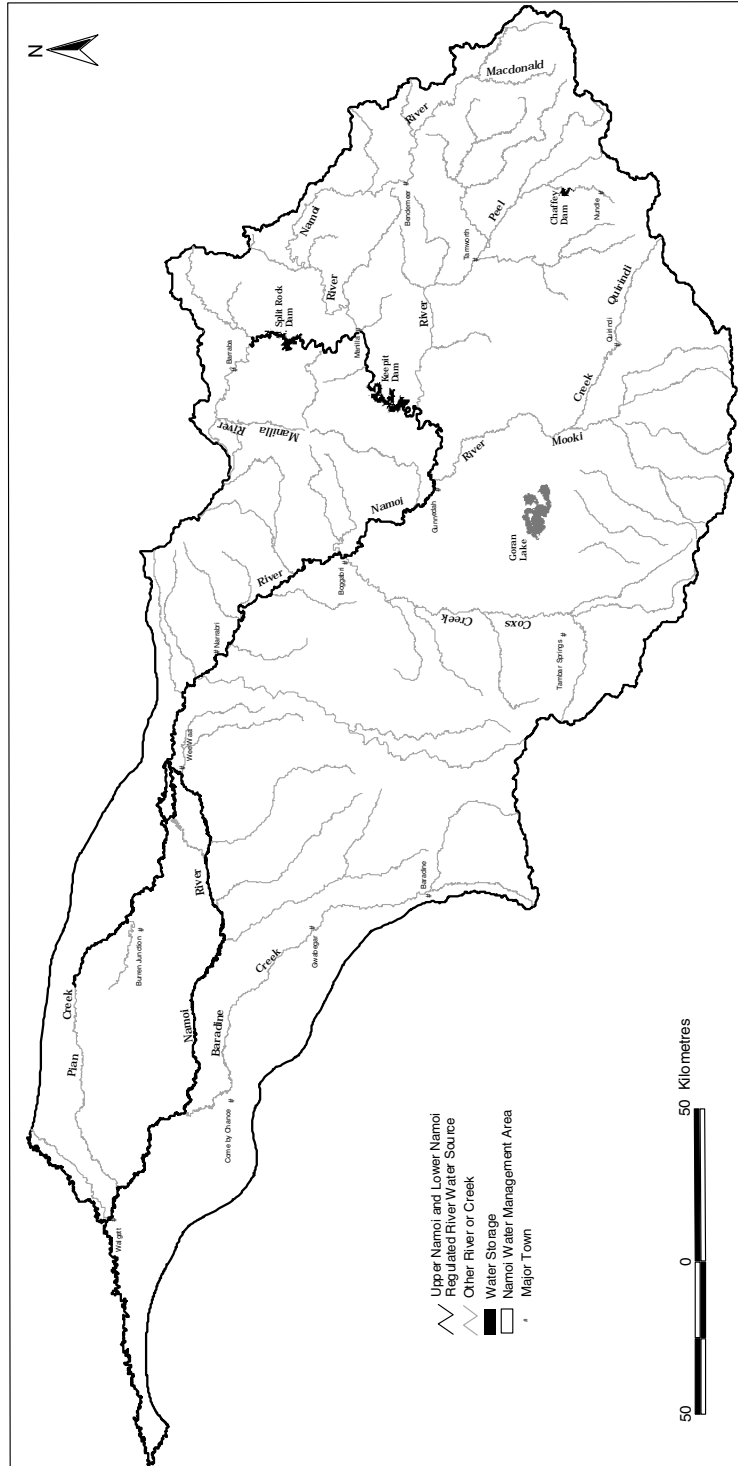
- (i) Anabranche of Namoi River, offtaking in T.S.R. 31104, Parish of Tipereena, County of Nandewar,
- (ii) Duncan Warrambool,
- (iii) Gunidgera Creek, offtaking from the Namoi River within T.S.R. 10783, Parish of Tulladunna, County of Jamison, downstream to the northern boundary of portion 21, Parish of Merah, County of Jamison,
- (iv) Horsearm Creek, from its confluence with Narrabri Creek upstream to a point coinciding with the upstream alignment of the Narrabri to Wee Waa road bridge on Main Road No.127 located in the town of Narrabri, Parish of Narrabri, County of Nandewar,
- (v) Namoi River, from the upper limit of Keepit Dam storage downstream to the offtake of Narrabri Creek, including all tributaries to the storage (named and unnamed) up to high water mark of the storage,
- (vi) Namoi River from its confluence with Narrabri Creek to Barwon River,
- (vii) Narrabri Creek,
- (viii) Pian Creek, from the confluence of unnamed watercourse within portion 27, Parish of Pian, County of Jamison, the confluence being approximately 200 metres east of the western boundary of portion 27 and approximately 400 metres north of the southwestern boundary of that portion, downstream to the northernmost western boundary of portion 37, Parish of Murra Murra, County of Denham,
- (ix) Ulled lagoon,
- (x) Unnamed watercourse, offtaking from Gunidgera Creek within portion 4, Parish of Weeta Waa, County of Jamison, downstream to its confluence with Pian Creek, within T.S.R. 27151, Parish of Pian, County of Jamison,
- (xi) Unnamed watercourse, from its offtake from Namoi River, in portion 10, Parish of Bullerawa, County of Baradine, to its re-entry in portion 11, said Parish, and
- (xii) Warriar lagoon.

Note. Pian Creek from Dundee Weir to its junction with the Namoi receives domestic and stock replenishment flows from these water sources, but does not itself, form part of these water sources.

Note. The Namoi Regulated River Water Source does not include the Peel River.

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Appendix 2 Namoi Water Management Area



Appendix 3 State floodplain harvesting principles

Section 1 Definition and categories of floodplain harvesting

- (1) Floodplain harvesting is the collection, extraction or impoundment of water flowing across floodplains. The floodplain flows can originate from local runoff that has not yet entered the main channel of a river, or from water that has overflowed from the main channel of a river during a flood. For the purposes of this policy the floodplain is defined as extending to the 1 in 100 year flood line.
- (2) Floodplain harvesting can generally be put into one of three categories:
 - (a) diversion or capture of floodplain flows using purpose built structures or extraction works to divert water into storages, supply channels or fields or to retain flows,
 - (b) capture of floodplain flows originating from outside of irrigated areas using works built for purposes other than floodplain harvesting. Examples are:
 - (i) levees and supply works such as off river storages constructed in billabongs or depressions that fill from floodplain flows, and
 - (ii) below ground level water channels from which the water is pumped into on farm storages, and
 - (c) opportunistic diversions from floodplains, depressions or wetlands using temporary pumps or other means.

Note. Capture of rainfall or runoff from farm irrigation fields, via tailwater systems or other means, is not floodplain harvesting.

Section 2 Floodplain harvesting management issues

- (1) The harvesting of water from floodplains reduces the amount of water reaching or returning to rivers. This decreases the amount of water available to meet downstream river health, wetland and floodplain needs and the water supply entitlements of other users.
- (2) Floodplain harvesting can seriously affect the connectivity between the local floodplain, wetlands and the river, through the loss of flow volume and redirection of water flows.
- (3) The *Water Act 1912* provided powers to license floodplain harvesting. However this was never applied as there was generally no requirement to restrict total overall water extractions or off-allocation diversions. Harvested floodplain water has been treated as a freely available bonus to a farmer's licensed entitlement.
- (4) This situation has now changed. The Murray-Darling Basin cap applies to all water diverted from inland NSW catchments and rivers. Licensed and off-allocation access has been subject to increasing restrictions. Embargoes on water licences are also in place on many areas on the coast.
- (5) Floodplain harvesting works and water extractions also clearly fall into those activities that the *Water Management Act 2000* requires to be only undertaken by way of a licence. The Act also requires such licensing to consider the ecological functioning of floodplains.
- (6) Floodplain harvesting can no longer be left outside of the State's water management and compliance system or as a source of increase in further water extractions. Given this, it is the Government's intention that floodplain harvesting

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works and taking of water from floodplains be licensed and managed. It will take a number of years to complete the process. However, the water sharing plans must signal the basic principles that will govern the process.

Section 3 Management of floodplain harvesting

- (1) Floodplain harvesting will not be a component of individual water sharing plans being produced for the regulated and unregulated rivers. During flood times water originating in one river system may flow across floodplains and along “flood runners” into adjacent river systems. It is therefore often not possible to assign an area of floodplain to a particular river.
- (2) Management of floodplain harvesting will occur on a state-wide basis, according to the six principles set out in section 4.
- (3) There are many thousands of existing floodplain works which will require licensing and this will be done over the next couple of years. The licensing process will include proper environmental impact assessments.
- (4) A separate category of licence will be established.

Section 4 Floodplain harvesting principles

- (1) Principle 1 is that all existing floodplain harvesting works and floodplain harvesting extractions will be licensed.
- (2) Principle 2 is that licensing will focus initially on controlling the structures, but with movement towards specifying volume limits and flow related access conditions, including metering of pumps

Note. While all surface and groundwater licences now (or will shortly) specify volume entitlements or annual limits to water, it is not possible to do this for floodplain harvesting licences at this stage. This is because the pattern of use is highly episodic and site and infrastructure specific, and current data on structures and use is minimal.

The Department of Land and Water Conservation will licence existing structures and specify monitoring of use (including metering of pumps) as a licence condition where possible. This may not be possible initially in cases where a tailwater system is also picking up floodplain water as they are difficult to separate, or where overland flow is being captured by a billabong for which we do not have any information on its capacity. Options for application of volumetric conditions will be developed and implemented where appropriate within the first five years of the initial water sharing plans.

- (3) Principle 3 is that no new works or expanded floodplain harvesting activities in the Murray-Darling Basin that will result in the diversion of additional water will be authorised.

Note. All new floodplain harvesting works are required by law to be licensed. However, as any new works would result in a growth in diversion, which would threaten river health and/or the water entitlements of others, such works would have to be offset by a reduction in other forms of water diversion.

- (4) Principle 4 is that floodplain diversions associated with works in place in the Murray-Darling Basin prior to the end of the 1994 irrigation season will be considered as within the NSW cap.

Note. Because cap is based on the use of water with development as it was in 1994, NSW considers that the water use that would result from use of the floodplain infrastructure in place in 1994, is part of the cap in each system.

- (5) Principle 5 is that once licensing is completed, an assessment of long-term use resulting from authorised structures against that from structures which existed in

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1994 will be carried out and appropriate steps taken to keep harvesting to cap levels.

Note. It is likely that there has been some growth in floodplain harvesting works and extractions since 1994. However, it is expected that the licensing process will result in some modification of existing works. This may be adequate to offset any post 1994 development. If not, restrictions on the use of the licensed works will have to be applied to return diversions to cap levels. Such restrictions could include restrictions on pumping times or a requirement to modify the work to allow a proportion of flows to be bypassed. By preventing the construction or enlargement of new works, the opportunity for any further growth in floodplain harvesting diversions will be minimised.

- (6) Principle 6 is that floodplain harvesting rights will not be tradeable.

Note. Trading of floodplain harvesting rights will not be permitted because the frequency and volume of use is site and infrastructure specific, and volume management will take some time to implement.

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Appendix 4 Performance indicators

Performance indicators for the Upper Namoi and Lower Namoi Regulated River Water Sources Water Sharing Plan			
Performance indicator	Related objective	Assessed by	Commentary
(a) Change in ecological condition of this water source and dependent ecosystems..	clause 10 (a)	<ul style="list-style-type: none"> Monitoring of ecological response to changed flow regimes, under the Integrated Monitoring of Environmental Flows program (<i>IMEF</i>) (each water source will have specific hypotheses from the set developed under IMEF). Other relevant studies as may be undertaken in specific water sources. 	<ul style="list-style-type: none"> IMEF tests a number of hypotheses to indicate how elements of river ecology respond to different aspects of the flow regime (including environmental flow rules, irrigation flows, and floods and wetland connectivity).
(b) Change in low flow regime.	clause 10 (a)	<ul style="list-style-type: none"> Number of days per water year where flow is below natural 95th and 80th percentiles. Average and maximum number of days per water year of continuous periods of flow which is below natural 95th and 80th percentiles. Measurement at end of system and specified key sampling sites. 	<ul style="list-style-type: none"> River Flow Objectives (RFOs) 1 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every objective is relevant to every river in NSW. Analysis would need to incorporate reference to seasonal indicators. Long-term modelling will reflect the influence of climate on flows. Appropriate data relating to flow distribution, such as summer/winter cropping balance, agronomical practices, on farm storage development, management and operation of environmental releases etc. Baseline should be the modelled water sharing plan scenario (rather than natural flows).

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Performance indicators for the Upper Namoi and Lower Namoi Regulated River Water Sources Water Sharing Plan			
Performance indicator	Related objective	Assessed by	Commentary
(c) Change in moderate to high flow regime.	clause 10 (a)	<ul style="list-style-type: none"> Number of days per water year where flow is above natural 30th, 15th and 5th percentiles. Average and maximum number of days per water year of continuous periods of flow which is above natural 30th, 15th and 5th percentiles. Measurement at end of system and other key sampling sites in these water sources. 	<ul style="list-style-type: none"> RFO 3.
(d) Change in water quality.	clause 10 (a) clause 10 (f)	<ul style="list-style-type: none"> Assessment and statistical analysis of key water quality parameters, and relationship to flow. 	<ul style="list-style-type: none"> This Plan's rules will contribute to a long-term change in water quality by affecting flow regimes and flow management to address issues such as algal management. There are many non-water sharing plan related factors that affect water quality (eg land-based activities and thermal pollution).
(e) Extent to which basic landholder rights requirements have been met.	clause 10 (c)	<ul style="list-style-type: none"> Basic rights allowances made according to plan provisions/implementation program requirements. Flows adequate to meet basic rights requirements (taking into consideration allowances for delivery). 	<ul style="list-style-type: none"> Basic rights usage figures in water sharing plans are estimated volumes (not actual use). Basic rights represents a very small proportion of water extraction in regulated systems.
(f) Extent to which local water utility and major utility requirements (where major utilities are involved in urban water provision) have been met.	clause 10 (b)	<ul style="list-style-type: none"> Percentage of years that reserves were adequate to satisfy local water utility water requirements. 	

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Performance indicators for the Upper Namoi and Lower Namoi Regulated River Water Sources Water Sharing Plan			
Performance indicator	Related objective	Assessed by	Commentary
(g) Change in economic benefits derived from water extraction and use.	clause 10 (d) clause 10 (e)	<ul style="list-style-type: none"> Change in regional gross margins versus annual total extractions based on year 1 benchmarks (as represented in IQQM). Movement of water to higher value crops as measured by increases in area and/or water taken by these enterprises versus lower value uses. Change in unit price of water transferred. Annual total volume of access licence assigned in each water year. 	<ul style="list-style-type: none"> There are many factors affecting economic status of a region, for example commodity prices, other sources of water (eg groundwater). The Performance Indicator is intended to isolate as much as possible the effects of water availability and price on the gross margin returns at a regional level. Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of this Plan provisions.
(h) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	clause 10 (a)	<ul style="list-style-type: none"> Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
(i) Extent to which native title rights have been met.	clause 10 (b)	<ul style="list-style-type: none"> Native title rights allowances made according to plan provisions/implementation program requirements. 	

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Appendix 5 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

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farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

groundwater source means a water source specified in a groundwater management plan.

hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, ***commitments to take water*** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or

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- (b) the total volume of water allocations in water allocation accounts, or
- (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.
- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

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Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
 - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or
 - (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and

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- (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
 - (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and

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- (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations

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in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.

- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:
- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or

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- (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.

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- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
- (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
- (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

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Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
 - (a) if either of the access licences is suspended under section 78 of the Act, or
 - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
 - (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:

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- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

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20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or
 - (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
 - (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

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- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Water Sharing Plan for the Lachlan Regulated River Water Source 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

 Water Sharing Plan for the Lachlan Regulated River Water Source 2003

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Water Sharing Plan for the Lachlan Regulated River Water Source 2003

Part 1 Introduction

1 Name of plan

This Plan is the *Water Sharing Plan for the Lachlan Regulated River Water Source 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000 as amended* (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on the 1 July 2003 and ceases 10 years after that date.

4 Water source and waters to which this Plan applies

- (1) The water source in respect of which this Plan is made is that between the banks of all rivers, from the upper limits of Wyangala Dam water storage downstream to the junction of the Lachlan River with the Murrumbidgee, which, at the date of commencement of this Plan, have been declared by the Minister to be regulated rivers.

Note. A regulated river is a river that has been declared by the Minister, by order published in the New South Wales Government Gazette, to be a regulated river.

Note. The regulated rivers referred to in subclause (1) are listed in Appendix 1.

- (2) The water source shall be known as the Lachlan Regulated River Water Source (hereafter **this water source**).
- (3) The rivers included in this water source may be varied under section 42 (2) of the Act as set out in Part 14 of this Plan.
- (4) This water source is within the Lachlan Water Management Area as constituted by the Ministerial order published in the NSW Government Gazette (hereafter **the Gazette**) on 23 November 2001.

Note. The Lachlan Water Management Area is shown on the map in Appendix 2.

- (5) This Plan applies to all waters contained within this water source but does not apply to waters contained within aquifer water sources underlying this water source or to water on land adjacent to this water source.

Note. Management of floodplain harvesting is not a component of this water sharing plan. Management of floodplain harvesting will occur according to a number of state-wide management principles, attached in Appendix 3.

5 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.

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- (2) Additional terms are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

6 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from the date of commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible, the rules embodied in this Plan apply to matters administered under the *Water Act 1912* in the interim.

7 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act this Plan is consistent with the State Water Management Outcomes Plan published in the Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 2 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to meeting those targets.

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Part 2 Vision, objectives, strategies and performance indicators

8 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

9 Vision

The vision for this Plan is to achieve a healthy Lachlan River that provides a dynamic and sustainable environment for native plants and animals, that is enjoyed and valued by the community and that is managed for the socio-economic interest of the people of the Lachlan catchment.

10 Objectives

The objectives of this Plan are to:

- (a) maintain or restore the key environmental features of the Lachlan River system by a river flow regime that, as much as possible, mimics natural conditions in order to make provision for the following outcomes:
 - (i) a diversity of natural in-stream and riparian habitat and biota,
 - (ii) the restoration, by naturally triggered flooding, of the riverine floodplain to its previous rich mosaic of ecosystems,
 - (iii) the improved health and function of wetlands as frequency and duration of inundation is restored,
 - (iv) an abundance and diversity of native aquatic species,
 - (v) an abundance and diversity of native water birds,
 - (vi) the restoration of water quality that supports aquatic ecosystems, and
 - (vii) the recovery of threatened species, communities and populations,
- (b) make provisions for access for extraction by towns, riparian landholders, irrigation and other industry for the benefit of rural communities in the Lachlan River system by providing for the following outcomes:
 - (i) a supply of water to provide for the needs of rural communities,
 - (ii) the specification and provision of basic landholder rights,
 - (iii) a water allocation system, which clarifies resource access, and enables flexibility and efficiency within climatic variability, and
 - (iv) the maintenance and enhancement of recreational opportunities based on water features,
- (c) provide water to ensure that the social needs and amenity values of the Lachlan Valley community, that are reliant upon water, continue to be met by providing for the following outcomes:
 - (i) supplies of water that deliver a range of recreational and amenity opportunities,
 - (ii) that aesthetic values are maintained, and
 - (iii) water management that recognises social impacts,

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- (d) water management that recognises, respects and incorporates the spiritual, economic and aesthetic values of the water source to provide for the following outcomes:
 - (i) the recognition and protection of the traditional rights of Aboriginal people,
 - (ii) protection of sacred sites,
 - (iii) the maintenance of traditional rights of access to birds, fish, crustacea and other traditional foods, and
 - (iv) the protection of the cultural, spiritual and identity aspects of rivers and wetlands.

Note. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in the Plan contribute to providing the specified outcomes.

11 Strategies

The strategies for reaching the objectives set out in clause 10 are to:

- (a) establish environmental water provisions (Part 3 of this Plan),
- (b) identify water requirements for basic landholder rights (Part 4 of this Plan),
- (c) identify water requirements for access licences (Part 6 of this Plan),
- (d) establish rules for granting of access licences (Part 7 of this Plan),
- (e) establish provisions that place limits on the availability of water (Part 8 of this Plan),
- (f) establish rules for making available water determinations (Part 8 of this Plan),
- (g) establish rules for the operation of water accounts (Part 9 of this Plan),
- (h) establish provisions specifying circumstances under which water may be extracted (Part 9 of this Plan), and
- (i) establish access licence dealing rules (Part 10 of this Plan).

12 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in ecological condition of this water source and dependent ecosystems,
- (b) change in low flow regime,
- (c) change in moderate to high flow regime,
- (d) change in water quality in this water source,
- (e) extent to which domestic and stock rights requirements have been met,
- (f) extent to which local water utility requirements have been met,
- (g) change in economic benefits derived from water extraction and use,
- (h) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and

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- (i) extent to which native title rights have been met.

Note. Appendix 4 details the objectives to which these performance indicators relate and the methods for assessing indicators.

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Part 3 Environmental water provisions

13 Environmental water provisions

This Part is made in accordance with sections 5 (3), 8 (1), 8 (2) and 20 (1) (a) of the Act.

14 Environmental health water

This Plan establishes the following environmental health water rules:

- (a) water volume in excess of the long-term extraction limit established in clause 31 of this Plan may not be taken from this water source and used for any purpose, and
- (b) water availability is to be managed as specified in clause 33 of this Plan to ensure water volume in excess of the long-term extraction limit is not being taken.

Note. By limiting long-term average extractions to an estimated 305,000 ML/year this Plan ensures that approximately 75% of the long-term average annual flow in the water source (estimated to be 1,212,000 ML/year) will be preserved and will contribute to the maintenance of basic ecosystem health.

15 Supplementary environmental water

- (1) This Plan establishes the following supplementary environmental water rules for the management of translucent releases from Wyangala Dam water storage:
 - (a) translucent releases may be made from Wyangala Dam during the period 15 May to 15 November, only if the inflows to Wyangala Dam water storage since 1 January that calendar year have exceeded 250,000 megalitres,
 - (b) translucent releases under subclause (1)(a) are to be made when the combination of Wyangala Dam inflows plus downstream tributary inflows would be sufficient to produce a flow downstream of Lake Brewster of greater than:
 - (i) 4,000 megalitres per day (hereafter *ML/day*) when the volume of water held in Wyangala Dam water storage is less than or equal to 50% of the full supply volume, or
 - (ii) 3,500 ML/day when the volume of water held in Wyangala Dam water storage is more than 50% of the full supply volume,
 - (c) the translucent release from Wyangala Dam is to be the lesser of the inflow to Wyangala Dam water storage and the release necessary to achieve a flow at Lake Brewster Weir of :
 - (i) 4,000 ML/day plus 25 ML/day for each 1% by which the volume of water held in Wyangala Dam water storage exceeds 0% of the full supply volume, when the volume of water held is less than or equal to 50% of the full supply volume,
 - (ii) 3,500 ML/day plus 31.25 ML/day for each 1% by which the volume of water held in Wyangala Dam water storage exceeds 0% of the full supply volume, when the volume of water held is greater than 50% of the full supply volume but less than or equal to 80% of the full supply volume, and

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- (iii) 6,000 ML/day plus 100 ML/day for each 1% by which the volume of water held in Wyangala Dam water storage exceeds 80% of the full supply volume,

Note. Subclause (1) (c) (iii) results in the maximum release from Wyangala Dam when it is full being the release necessary to achieve a flow at Lake Brewster Weir of 8000 ML/day.

- (d) translucent releases under subclause (1) (a) are only to be made when the sum of flows passing downstream of Lake Brewster Weir (measured at Brewster Weir) minus downstream water orders, replenishment flows, losses associated with delivery of these water orders, and replenishment flows and any flow volume resulting from airspace releases under clause 65, in the period 1 June to 30 November, is less than 350,000 megalitres,
- (e) tributary inflows occurring at any time that the translucent releases conditions under subclauses (1) (a), (1) (b) and (1) (d) are satisfied are not to be used for extractive purposes or diverted to, or stored in, any weirs or water storages except to the extent that they are in excess of the flow required to satisfy the flow rate downstream of Lake Brewster that results from the calculation in subclause (1) (b),
- Note.** If flows are insufficient to satisfy subclause (1) (b), or the conditions specified in subclauses (a) or (d) are not met, tributary inflows may be diverted and stored in Lake Cargelligo or Lake Brewster, consistent with normal operational management.
- (f) water flows required to meet translucent release flow targets in subclause (1) (c) are not to be taken or used for any other purpose,
- (g) releases of water from Lake Cargelligo and Lake Brewster may be substituted for all or part of the translucent releases from Wyangala Dam specified in this clause if making the translucent releases from Wyangala Dam is likely to cause flooding,
- (h) water released in accordance with subclause (1) (g) from Lake Brewster shall be accounted for as flow passing downstream of Lake Brewster Weir under subclause (1) (d), and
- (i) in the event that the release capacity of Wyangala Dam is insufficient to provide the release as specified in subclause (1) (c) plus the releases required to satisfy access licence orders, then:
- (i) releases are to equal the release capacity,
- (ii) water is to be permitted to be taken in accordance with access licence water orders,
- (iii) the portion of the required translucent release which has not been supplied is to be calculated as the total release minus the release made to satisfy access licence holder demands,
- (iv) the volumes calculated under subclause (1) (i) (iii) are to be accrued and released at the earliest opportunity, and
- (v) releases under subclause (1) (i) (iv) are not to be subject to the requirements of subclauses (1) (a), (1) (b) and (1) (c).
- (j) a review of the requirement, in subclause (1) (a), that inflows to Wyangala Dam water storage since 1 January in a calendar year must have exceeded 250,000 megalitres before translucent releases may be made, is to :

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- (i) be carried out by the Minister before the end of year 5 of this Plan, and
 - (ii) assess the environmental and socio-economic impacts of reductions in the required volume of inflow, and
- (k) subclause (1) (a) may be varied under section 42 (2) of the Act and as set out in Part 14 of this Plan.
- (2) This Plan establishes the following supplementary environmental water rules for the management of an environmental contingency allowance held in Wyangala Dam water storage (hereafter *the WECA*) and management of an environmental contingency allowance held in Lake Brewster (hereafter *the LBECA*):
 - (a) accounts of the water credited to and released from the WECA and LBECA are to be kept,
 - (b) 10,000 megalitres is to be credited to the WECA account and 10,000 megalitres is to be credited to the LBECA account:
 - (i) on 1 July each year, if the total volume of water in the water allocation accounts of regulated river (general security) access licences exceeds 50% of the total volume of regulated river (general security) access licence share components, or
 - (ii) if no crediting under subclause (2) (b) (i) occurred on 1 July of that water year, when the sum of the volume of water in the water allocation accounts of regulated river (general security) access licences at 1 July, plus the volume of water provided by available water determinations for those licences during the water year, is equivalent to 75% of total regulated river (general security) share components,
 - (c) water credited to the WECA and LBECA accounts may be released for ecological purposes, including, but not limited to, completion of waterbird breeding events, promotion of fish breeding, promotion of fish passage, wetland watering and increasing flow variability,
 - (d) rules determining the volume and timing of releases of water credited to the WECA and LBECA accounts shall be specified in accordance with procedures established by the Minister,
 - (e) the volume of LBECA available for release from Lake Brewster at any time shall be the lesser of the volume of credit remaining in the LBECA account and the active storage in Lake Brewster, and
 - (f) any credits remaining in the WECA and LBECA accounts are to be forfeited at the end of each water year.

Note. It is not possible to forecast when releases of water from the WECA and LBECA will be required, as releases occur in response to unpredictable environmental circumstances. To allow estimation of the effect of the WECA and LBECA rules on water extractions computer modelling has assumed that a total of 5,000 megalitres of WECA and of LBECA were released at the end of each years when there was water in the accounts. It is expected that, over the life of the Plan average releases from each account would not exceed these figures.
- (3) This Plan establishes the following supplementary environmental water rules for the management of a water quality allowance (hereafter *the WQA*):
 - (a) an account of the water credited to and released from the WQA is to be kept,

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- (b) 20,000 megalitres is to be credited to the WQA account on 1 July each year,
- (c) water credited to the WQA may be released for any water quality management purpose, but in particular for reduction of salinity levels and mitigation of blue-green algae impacts,
- (d) rules determining the volume and timing of releases of water credited to the WQA account shall be specified in accordance with procedures established by the Minister, and
- (e) any credits remaining in the WQA accounts are to forfeit at the end of each water year.

16 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there is a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

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Part 4 Basic landholder rights

17 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

18 Domestic and stock rights

Note. Water from this water source should not be consumed without prior treatment, which is adequate to ensure its safety.

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights are estimated to be 4,211 megalitres per year (hereafter *ML/year*).
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting this water source or as a result of an increase in the exercise of domestic and stock rights on existing landholdings.

- (3) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising domestic and stock rights through a repeat of the worst period of low inflows to this water source, as represented in flow information held by the Department.
- (4) To achieve subclause (3), sufficient volumes of water must be set aside from assured inflows into the water source and in reserves held in Wyangala Dam water storage or other water storages.

Note. The Minister may issue an order under section 328 of the Act to restrict the exercise of domestic and stock basic rights from the water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

19 Native title rights

Note. Water from this water source should not be consumed without prior treatment, which is adequate to ensure its safety.

- (1) At the commencement of this Plan there are no holders of native title rights in this water source and therefore native title rights are 0 ML/year.
- (2) This Plan recognises that native title rights may increase during the term of this Plan.

Note. Increase in native title rights may occur as a result of the granting of native title rights under the *Commonwealth Native Titles Act 1993*.

- (3) The water supply system shall be managed so that it would be capable of maintaining supply to those exercising native title rights through a repeat of the worst period of low inflows to this water source represented in flow information held by the Department
- (4) To achieve subclause (3), sufficient volumes of water must be set aside from assured inflows into the water source and reserves held in Wyangala Dam water storage or other water storages.

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Part 5 Bulk access regime

20 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 3 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 4 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 6 of this Plan.
- (3) The bulk access regime established under subclause (2):
 - (a) establishes rules according to which access licences are granted as provided for in Part 7 of this Plan,
 - (b) recognises and is consistent with the limits to the availability of water as provided for in Part 8 of this Plan,
 - (c) establishes rules according to which available water determinations are to be made as provided for in Part 8 of this Plan,
 - (d) recognises the effect of climatic variability on the availability of water as provided for in Part 8 of this Plan,
 - (e) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction of the availability of water as provided for in Part 8 of this Plan, and
 - (f) establishes rules according to which access licences are managed as provided for in Part 9 of this Plan.

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Part 6 Requirements for water under access licences

21 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The following clauses in this Part represent the total volumes specified in the share components of access licences in this water source. There is no commitment to make these volumes available. The actual volumes available at any time will depend on climate, access licence priority and the rules in this Plan.

22 Share component of domestic and stock access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of domestic and stock access licences authorised to extract water from this water source will total 13,100 megalitres.

23 Share component of local water utility access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of local water utility access licences authorised to extract water from this water source will total 15,539 megalitres.

24 Share component of regulated river (high security) access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (high security) access licences authorised to extract water from this water source will total 26,472 megalitres.

25 Share component of regulated river (general security) access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of regulated river (general security) access licences authorised to extract water from this water source will total 592,847 megalitres.

26 Share component of regulated river (conveyance) access licence

The Minister shall, under section 42(2) of the Act and as set out in Part 14 of this Plan, replace this clause with the volume of the share component of the regulated river (conveyance) access to be held by Jemalong Irrigation Limited.

27 Share component of supplementary water access licences

There shall be no supplementary water access licences authorised to extract water from this water source.

28 Changes to total share component

This Plan recognises that total requirements for water under access licences in each access licence category may change during the term of this Plan as a result of:

- (a) the granting, surrender, cancellation or non renewal of access licences, or
- (b) variations to local water utility access licences arising from section 66 of the Act.

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Part 7 Rules for granting access licences

29 Rules for granting access licences

- (1) This Part is made in accordance with section 20 (2) (b) and 63 of the Act.
- (2) Access licences may be granted in this water source, subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than for access licences of the following kinds:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) domestic and stock access licences, or
 - (c) an access licence resulting from an application of a type listed in section 82 (1) of the Act.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstances relating to that access licence, and that the share component sought will be the minimum required to meet that purpose and circumstances.
- (5) Subclause (4) does not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.

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Part 8 Limits to the availability of water

Division 1 Long-term extraction limit

30 Limit to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

31 Volume of the long-term extraction limit

- (1) This Plan establishes a long-term extraction limit for this water source which is the lesser of:
 - (a) the long-term average annual extraction from this water source that would occur with:
 - (i) the water storages, private water management infrastructure, cropping mix that existed in 1999/2000,
 - (ii) the share components existing at the time of commencement of this Plan,
 - (iii) the maximum crop area and the crop planting behaviour adopted as representative of baseline conditions used for assessment of Cap under Schedule F of the Murray Darling Basin Agreement, and
 - (iv) application of the water management rules defined in this Plan, or
 - (b) the long-term average annual extraction from this water source that would occur under the baseline conditions used for assessment of the Cap under Schedule F of the Murray Darling Basin Agreement.

Note. The baseline conditions used for assessment of the Cap under Schedule F of the Murray Darling Basin Agreement means the level of water resource development at June 1994.

Note. An estimate of the long-term average annual extraction that would occur under the conditions specified under subclause (1)(a) has been made by the Department using the Lachlan IQQM computer model scenario run number E229. This indicated a long-term average annual extraction volume of approximately 305,000 megalitres.

Note. An assessment of the long-term average annual extractions that would result from the baseline conditions in subclause (b) has been made using the Lachlan IQQM computer model scenario run number C071A. This indicated a long-term average annual extraction volume of approximately 315,000 megalitres.

Note. The long-term extraction limit recognises the effect of climatic variability on the availability of water, in accordance with section 20(2)(c) of the Act, as historic climate and river flow information is used in its determination.

- (2) The values referred to in subclauses (1) (a) and (1) (b) shall be adjusted for any access licence dealings under section 71E of the Act.
- (3) For the purposes of establishing the long-term extraction limit and auditing compliance with it, the following shall be included:
 - (a) all water extractions by holders of all categories of access licences in accordance with the rules used for accounting of Cap diversions for Schedule F of the Murray Darling Basin Agreement,
 - (b) domestic and stock rights and native title rights extractions,
 - (c) volumes of water delivered as adaptive environmental water,

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- (d) floodplain harvesting extractions determined to be taken for use in conjunction with extractions from this water source, and
 - (e) water allocations assigned from the water allocation accounts of access licences in this water source to the water allocation accounts of access licences in other water sources.
- (4) For the purposes of establishing the long-term extraction limit and auditing compliance with it,
- (a) the assessed volume of extractions shall be reduced by the volume of water allocations being assigned from the water allocation accounts of access licences in any other water source to the water allocation accounts of access licences in this water source, and
 - (b) the following shall not be included:
 - (i) replenishment flows made in accordance with this Plan, or
 - (ii) diversion of water pursuant to the environmental health water rules and the supplementary environmental water rules in Part 3 of this Plan.

32 Assessment of the long-term extraction limit and current long-term average annual extraction

- (1) Assessment of the long-term extraction limit and the current long-term average annual extraction shall be carried out after the end of each water year, using the hydrologic computer model that, at the time, is approved by the Department for assessing long-term water extraction from this water source.
- (2) To assess the long-term extraction limit, the model referred to in subclause (1) shall be set to represent as closely as possible the conditions referred to in clauses 31 (1) (a) and 31 (1) (b).
- (3) To assess the current long-term average annual extraction from this water source, the model referred to in subclause (1) shall be set to represent as closely as possible all water use development, water supply system management and other factors affecting the quantity of long-term average annual water extraction from this water source at the time of the assessment.
- (4) Any advice provided by the Compliance Assessment Advisory Committee, if one has been established under clause 34, should be considered in relation to assessments under subclause (1).

33 Maintaining compliance with the long-term extraction limit

- (1) The long-term average annual extraction from this water source shall not be permitted to exceed the long-term extraction limit specified in clause 31.
- (2) Pursuant to subclause (1), the maximum volume that may be taken under or assigned from a regulated river (general security) access licences during any water year shall be reduced, as specified in clause 35, if:
 - (a) it has been assessed that the current long-term average annual water extraction from the water source exceeds the long-term extraction limit specified in clause 31 (1) by:
 - (i) 3% of the long-term extraction limit specified in clause 31 (1), or

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- (ii) half the difference between the volume specified in clause 31 (1) (a) and the volume specified in clause 31 (1) (b), or
 - (b) it has been assessed that the current long-term average annual water extraction from the water source exceeds the volume specified in clause 31 (1) (b), or
 - (c) assessments in accordance with clause 32 for 3 consecutive water years indicate that the current long-term average annual water extraction from the water source exceed the long-term extraction limit.
- (3) The degree of reduction under subclause (2) shall be the degree that is assessed necessary to return the long-term average annual extraction from this water source to the long-term extraction limit.
- (4) The assessment of the degree of reduction required under subclause (2) shall be made using the same computer model used to carry out assessments of extractions compared to the long-term extraction limit under clause 32.
- (5) Any advice provided by a Compliance Assessment Advisory Committee, if one has been established under clause 34, should be considered in relation to assessments under subclause (4).
- (6) If an assessment under clause 32 indicates that current long-term average annual extraction is below the long-term extraction limit by more than 3%, then the maximum annual volume that may be taken under and assigned from a regulated river (general security) access licences during any water year, as specified in clause 35, may be increased to the degree that it is assessed necessary to return long-term average annual extraction to the long-term extraction limit.
- (7) The assessment of the degree of increase under subclause (6) shall be made using the same computer model used to carry out assessments of usage compared to the long-term extraction limit under clause 32.
- (8) Any advice provided by a Compliance Assessment Advisory Committee, if one has been established under clause 34, should be considered in relation to assessments under subclause (7).

34 Compliance Assessment Advisory Committee

- (1) The Minister should establish a Compliance Assessment Advisory Committee under section 388 of the Act for the purpose of providing advice regarding assessments under clauses 32 and 33.
- (2) In providing its advice the Compliance Assessment Advisory Committee should consider possible improvements to:
 - (a) the process for assessing current long-term average annual extractions,
 - (b) the computer model referred to in clause 32,
 - (c) the data used in the computer model referred to in clause 32, and
 - (d) the effect of any actions taken in accordance with subclauses 33 (2) and 33 (6).
- (3) Membership of the Compliance Assessment Advisory Committee should be for a period of 5 years and should consist of the following:
 - (a) a person representing the Department,

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- (b) a person representing the State Water arm of the Department, or its successor,
- (c) a person representing NSW Agriculture, or its successor,
- (d) no more than 3 persons representing the irrigation industry,
- (e) a person representing local government,
- (f) a person representing the National Parks and Wildlife Service, Environment Protection Authority or NSW Fisheries, or their successors,
- (g) a person representing nature conservation interests, and
- (h) other members as required by the Minister.

35 Limit to the annual volume that may be taken under or assigned from regulated river (general security) access licences

- (1) The maximum volume that may be taken under or assigned from a regulated river (general security) access licence during any water year shall be 'X%' of the licence share component volume plus the volume of water assigned to the access licence account from another access licence account during that water year, where 'X%' is determined in accordance with clause 33, subject to the provisions of subclause (2).
- (2) 'X%' in subclause (1) may not exceed 100%.
- (3) 'X%' in subclause (1) shall be 75% for the 2003/2004 water year.

Division 2 Available water determinations

36 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) All available water determinations in this water source shall be expressed as a percentage of the share component of each access licence in a licence category.

37 Available water determinations for domestic and stock access licences

- (1) The water supply system shall be managed so that available water determinations for domestic and stock access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into the water source and reserves held in Wyangala Dam water storage or other water storages to provide for subclause (1).
- (3) The available water determination for domestic and stock access licences made for the commencement of each water year shall be 100% of share components whenever possible.
- (4) The sum of available water determinations made for domestic and stock access licences in any water year shall not exceed 100% of share components.
- (5) This Plan recognises that the water requirement of domestic and stock access licences may increase during the term of the Plan in accordance with clause 29.

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- (6) The volumes of water set aside from assured inflows into this water source and reserves held in Wyangala Dam water storage or other water storages shall be adjusted as required over the course of this Plan, if necessary to do so to ensure subclause (1) is satisfied.

38 Available water determinations for local water utility access licences

- (1) The water supply system shall be managed so that available water determinations for local water utility access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source, represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into the water source and reserves held in Wyangala Dam water storage or other water storages to provide for subclause (1).
- (3) The available water determination for local water utility access licences made for the commencement of each water year shall be 100% of share components whenever possible.
- (4) The sum of available water determinations made for local water utility access licences in any water year shall not exceed 100% of share components.
- (5) The Plan recognises that the water requirement of local water utility access licences may increase during the term of the Plan in accordance with clause 29 and section 66 of the Act.
- (6) The volumes of water set aside from assured inflows into the water source and reserves held in Wyangala Dam water storage or other water storages shall be adjusted as required over the course of this Plan, if necessary to do so, to ensure subclause (1) is satisfied.

39 Available water determinations for regulated river (high security) access licences

- (1) The water supply system shall be managed so that available water determinations for regulated river (high security) access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows to this water source represented in flow information held by the Department.
- (2) Sufficient volumes of water must be set aside from assured inflows into the water source and reserves held in Wyangala Dam water storage or other water storages to provide for subclause (1).
- (3) The available water determination for regulated river (high security) access licences made for the commencement of each water year shall be 100% of share components whenever possible.
- (4) If the available water determination made under subclause (3) is less than 100% of share components then further assessments of available water resources shall be carried out at least monthly and available water determinations made until the sum of available water determinations for the water year is 100% of share components.
- (5) The sum of available water determinations made for regulated river (high security) access licences in any water year shall not exceed 100% of share components.
- (6) Available water determinations made for regulated river (high security) access licences must take into account:
 - (a) the environmental water provisions established by this Plan,

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- (b) requirements for domestic and stock rights,
- (c) requirements for native title rights,
- (d) requirements for domestic and stock access licences,
- (e) requirements for local water utility access licences,
- (f) allocations remaining in access licence water allocation accounts from previous available water determinations,
- (g) water losses associated with the holding and delivery of water to meet the requirements specified in subclauses (a) to (f),
- (h) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
- (i) any other relevant matters.

40 Available water determinations for regulated river (general security) access licences

- (1) An available water determination is not to be made for regulated river (general security) access licence holders in any water year until the sum of available water determinations for regulated river (high security) access licences for the water year is equivalent to 100% of share components.
- (2) Available water determinations made for regulated river (general security) access licences shall be based on the volume available after making provision for:
 - (a) the environmental water provisions established by this plan,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) requirements for regulated river (high security) access licences,
 - (g) allocations remaining in access licence water allocation accounts from previous available water determinations;
 - (h) water losses associated with the holding and delivery of water to meet the requirements identified in subclauses (a) to (g),
 - (i) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
 - (j) any other relevant matters.

41 Available water determinations for regulated river (conveyance) access licences

The Minister, shall under section 42 (2) of the Act replace this clause with the available water determination rules for regulated river (conveyance) access determined as set out in Part 14 of this Plan.

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Part 9 Rules for managing access licences

Division 1 General

42 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 20 (2) (e), 21 (a) and 21 (c) of the Act having regard to:

- (a) the environmental water rules established in Part 3 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 4 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 6 of this Plan.

Division 2 Water allocation account management

43 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.

44 Accrual of water allocations

Water allocations shall be accrued into each access licence water allocation account in accordance with the available water determinations made for the category of the access licence.

45 Volume taken under access licences

Note. Section 341 of the Act makes it unlawful to take a volume of water under an access licence that exceeds the volume of water allocation which is credited to the access licence at the time of water extraction.

- (1) The water allocation taken under domestic and stock access licences, local water utility access licences, regulated river (high security) access licences, regulated river (general security) access licences and regulated river (conveyance) access licences shall be assessed as:
 - (a) the volume of water taken by the approved water supply works nominated by the access licence, or
 - (b) the greater of
 - (i) the volume of water extracted by the approved water supply works nominated by the access licence, or
 - (ii) the volume of water ordered for extraction by the approved water supply works nominated by the access licence,

where the Minister has applied such a discretionary condition to the access licence.

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- (2) The Minister should only apply a discretionary condition in relation to subclause (1) (b) where this has been provided for in a compliance management strategy approved by the Minister.

Note. It is intended that the discretionary condition referred to above should only be applied where water orders have been exceeding the volume of water being taken under a licence and this cannot be explained by rainfall or other unavoidable factors.

46 Accounting of assigned water allocations and return flows

- (1) Water allocations assigned from a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be debited from that water allocation account and water allocations assigned to a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be credited to that water allocation account.
- (2) Water allocations may also be recredited to access licence water allocation accounts under section 76 of the Act, in accordance with water return flow rules established under section 75 of the Act.

47 Carrying over of water allocation credits and water allocation account limits

- (1) Water allocation remaining in the water allocation accounts of local water utility access licences, domestic and stock access licences and regulated river (high security) access licences cannot be carried over from one water year to the next.
- (2) Water allocation remaining in the water allocation accounts of regulated river (general security) access licences may be carried over from one water year to the next.
- (3) The maximum volume that may be held in the water allocation accounts of regulated river (general security) access licences at any time shall be 136% of their access licence share component.
- (4) The Minister shall, under section 42 (2) of the Act, replace this subclause with any required rules relating to limits on:
- (a) the maximum volume that may, at any time, be held in the accounts of regulated river (conveyance) access, and
- (b) the volume of water allocation that may be carried over from one water year to the next in the water allocation accounts of regulated river (conveyance) access licences,

determined as set out in Part 14 of this Plan.

Division 3 Extraction conditions

48 General priority of extractions

Where extraction components of access licences do not specify the rate as a share of supply capability or a volume per unit time, the following priority of extractions shall apply whenever supply capability is insufficient to satisfy all orders for water in any section of this water source:

- (a) water shall be supplied to domestic and stock access licences, local water utility access licences and regulated river (high security) access licences that have placed orders for water, and

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- (b) then any remaining supply capability shall be shared between regulated river (general security) and regulated river (conveyance) access licences that have placed an order for water, in proportion to share components specified on the access licences.

49 Numerical specification of extraction components

- (1) At any time during the term of this Plan, the Minister may, in accordance with the mandatory conditions on access licences, amend the extraction components of access licences in this water source, or in any section of this water source.
- (2) Action under subclause (1) should be undertaken as follows:
 - (a) the specified rate in the extraction component of each access licence should be a volume per unit of time or a share of supply capability,
 - (b) the specified rate in the extraction component of each domestic and stock local water utility, and regulated river (high security) access licence should be sufficient to satisfy the maximum daily water needs, and
 - (c) after satisfying subclause (b), the remaining supply capability should be distributed among regulated river (general security) access licences and regulated river (conveyance) access licences in proportion to the share component of each access licence.
- (3) When action under subclause (1) is undertaken, the Minister may also, in accordance with mandatory conditions on access licences, amend the extraction components of access licences in other sections of this water source to exclude extractions in sections of this water source affected by the action under subclause (1).

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Part 10 Access licence dealing rules

50 Access licence dealings

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002, under section 71L of the Act.

Note. The access licence dealing principles referred to in (1) are contained in Appendix 5.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. Access licence dealings include changes of licence ownership, conversions of licence category, movement of share component from one access licence to another access licence, movement of water allocation from one access licence allocation account to another access licence allocation account and changes in the location of water supply that can take water available under the licence. These dealings must comply with the provisions of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

51 Rules relating to constraints within this water source

- (1) This clause relates to dealings under sections 71B, 71D, and 71J of the Act and to dealings in respect of water allocation assignments within this water source under section 71G of the Act.
- (2) Any dealing that would result in the total volume of the share components of access licences nominating water supply works in the section of Willandra Creek that is part of this water source, exceeding the total volume of the share components of access licences nominating water supply works in that section at the commencement of this Plan, is prohibited.
- (3) Any dealing that would result in the total volume of the share components of access licences nominating water supply works in this water source downstream of the Lachlan River at Booligal, exceeding the total volume of the share components of access licences nominating water supply works downstream of the Lachlan River at Booligal at the commencement of this Plan, is prohibited.
- (4) Any dealing that would result in the assignment of all or part of the share component of an access licence, whose extraction component only permits the taking of water upstream of Lake Cargelligo Weir, to an access licence, whose extraction component only permits the taking of water downstream of Lake Cargelligo Weir, is prohibited.
- (5) Any dealing that would result in the assignment of all or part of the share component of an access licence, whose extraction component only permits the taking of water downstream of Lake Cargelligo Weir, to an access licence, whose extraction component only permits the taking of water upstream of Lake Cargelligo Weir, is prohibited.
- (6) Any dealing that would result in the total volume of water allocation that may be taken in any water year under access licences whose extraction components only permit the taking of water downstream of Lake Cargelligo Weir, exceeding the

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total volume of the share components of access licences nominating water supply works in that section at the commencement of this Plan is prohibited.

- (7) Subclauses (4), (5) and (6) may be varied under section 42 (2) of the Act and as set out in Part 14 of this Plan.
- (8) Any dealing that would result in the total volume of water allocation that may be taken in any water year under access licences nominating water supply works in the section of Willandra Creek that is part of this water source, exceeding the total volume of the share components of access licences nominating water supply works in that section at the commencement of this Plan is prohibited.
- (9) Any dealing that would result in the total volume of water allocation that may be taken in any water year under access licences nominating water supply works in this water source downstream of the Lachlan River at Booligal, exceeding the total volume of the share components of access licences nominating water supply works downstream of the Lachlan River at Booligal at the commencement of this Plan is prohibited.

52 Rules for change of water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been effected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.
- (2) Access licences in other water sources outside of this water source may be issued following cancellation of access licences in this water source, only if:
 - (a) the access licence dealing rules in the receiving water source permit such a dealing,
 - (b) a conversion factor, established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, has been applied, and
 - (c) the water source in which the access licence is issued is one of the following:
 - (i) a water source within the Lachlan Unregulated Extraction Management Unit, (as defined in the *Water Sharing Plan for the Mandagery Creek Water Source 2003*), and not on a river that is primarily fed by effluent flows from the Lachlan River, or

Note. The prohibition on the issue of licences within effluent rivers is included to stop licence trading leading to an increase in extractions from rivers feeding environmentally sensitive wetland areas.
 - (ii) a regulated river in the Belubula River catchment.
- (3) Access licences in this water source may be issued following cancellation of access licences in other water sources, only if:
 - (a) the access licence dealing rules in the other water source permit such a dealing,
 - (b) a conversion factor, established by the Minister and published in an Order made under section 71L of the Act that protects environmental water,

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domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, has been applied.

Note. The access licence dealing principles gazetted on 27 December 2002 prohibit a change of water source dealing where the movement is from an unregulated water source to a regulated water source.

53 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category is prohibited except as provided for under this clause.
- (3) On application of the access licence holder, the Minister may cancel a regulated river (general security) access licence, and issue a regulated river (high security) access licence, subject to:
 - (a) the application of a conversion factor established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, and
Note. It has been assessed that a conversion factor of 0.45 should apply to the conversion of the first 30,000 Megalitres of regulated river (general security) access licence to regulated river (high security) access licence.
 - (b) the volume of water in the regulated river (general security) access licence water allocation account being equal to or greater than its share component volume.
Note. The volume of water in the regulated river (general security) access licence water allocation account which is in excess of the share component volume of the new regulated river (high security) access licence will not be credited to the new regulated river (high security) access licence account.
- (4) On application of the access licence holder, the Minister may cancel a regulated river (high security) access licence, and issue a regulated river (general security) access licence, subject to:
 - (a) the application of a conversion factor equal to one divided by the conversion factor established in subclause (3), and
 - (b) such an application not resulting in an increase of total regulated river (general security) access licence share components above the total volume of regulated river (general security) access licence share components at the time of commencement of Part 2 of Chapter 3 of the Act.
Note. This would allow conversion of a regulated river (high security) access licence to a regulated river (general security) access licence only if there had been a corresponding or larger volume of regulated river (general security) access licence share component converted to regulated river (high security) access licence.
- (5) On application of the licence holder, the Minister may cancel a regulated river (conveyance) access licence and issue a regulated river (general security) access licence or a regulated river (high security) access licence, subject to:
 - (a) the application of a conversion factor established by the Minister and published in an Order made under section 71L of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source, and

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- (b) where the licence to be issued is a regulated river (high security) access licence, the volume of water in the regulated river (conveyance) access licence water allocation account being equal to or greater than its share component volume.

54 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Access licence equivalents in other States may not be transferred into this water source.
- (3) Access licences in this water source may not be transferred into another State.

55 Rules for water allocation assignment between water sources

- (1) This clause relates to dealings under section 71G of the Act in relation to water allocation assignments between water sources.
- (2) Water allocations from the water allocation accounts of access licences in this water source may not be assigned to the water allocation accounts of access licences in other water sources.
- (3) Water allocations from the water allocation accounts of access licences in other water sources may not be assigned to the water allocation accounts of access licences in this water source.

56 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Water allocation equivalents from other States may not be assigned to the water allocation accounts of access licences in this water source.
- (3) Water allocations from the water allocation accounts of access licences in this water source may not be assigned to water allocation equivalents in other States.

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Part 11 Mandatory conditions

57 Mandatory conditions on access licences

- (1) This Part is made in accordance with section 17 (c) and 20 (2) (e) of the Act.
Note. The Minister may impose discretionary conditions at any time on an access licence in accordance with section 66(1)(b) of the Act.
- (2) All access licences in this water source shall have mandatory conditions to give effect to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence including whether extraction is permitted upstream or downstream of Lake Cargelligo Weir,
 - (c) the requirement that extraction under the access licence shall be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence shall be subject to the water allocation account management rules established in Part 9 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence may only occur if the resulting debit to the access licence account shall not exceed the volume of water allocation remaining in the access licence account,
 - (f) the requirement that water may only be taken by water supply works nominated on the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.
- (3) All access licences shall have a mandatory condition that facilitates the provisions of clause 49 of this Plan.
- (4) All domestic and stock access licences, local water utility access licences, regulated river (high security) access licences and regulated river (general security) shall have mandatory conditions that only allow the taking of water if it has been ordered in accordance with procedures established by the Minister.
- (5) All domestic and stock access licences shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption or stock watering as defined in section 52 of the Act.
- (6) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act.
- (7) All regulated river (general security) access licences shall have mandatory conditions to reflect and facilitate application of the provisions of clause 35 of this Plan.

58 Mandatory conditions on water supply works approvals

All approvals for water supply works in this water source shall have mandatory conditions to give effect to the following:

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- (a) flow measurement devices shall be installed and maintained on all works used for extraction of water under an access licence and shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
- (b) water extraction, property water management infrastructure and cropping details shall be provided on request, in the form and in accordance with procedures established by the Minister, and
- (c) the taking of water may only occur in accordance with the conditions applying to the access licence from whose water allocation account the taking of water will be debited.

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Part 12 System operation rules

59 System operation rules

This Part is made in accordance with section 21 (e) of the Act.

60 Replenishment flows

- (1) The following replenishment flows are to be provided in each water year if required:
 - (a) a volume of up to 12,000 megalitres per water year to Willandra Creek downstream from Homestead Weir to the Ivanhoe/Balranald Road (Grid Reference 229700 east, 6333000 north, Kilfera Map, 1:100,000, Sheet 7731), which volume includes water for the township of Ivanhoe and Morrison's Lake.
 - (b) a volume of up to 9,000 megalitres per water year to the Marrowie Creek Trust District downstream to Cuba Dam (Grid Reference 266800 east, 6249000 north, Tarwong Map, 1:50,000, Sheet 7730), and
 - (c) a volume of up to 9,000 megalitres per water year to the Torrigany, Muggabah and Merrimajeel Creeks Trust District downstream to the Murrumbidgee Swamp (Angorra Clump) (Grid Reference 281000 east, 6249000 north, Booligal Map, 1:50,000, Sheet 7830) on Merrimajeel Creek and the point on Muggabah Creek at Grid Reference 279000 east, 6239700 north, Booligal Map, 1:50,000, Sheet 7830).
- (2) Booberoi Creek is to receive a continuous supply at its off-take at a rate sufficient to provide for town and domestic supply and stock watering and produce a visible flow at the Ginniguldrie Road Bridge, providing that the volume so supplied does not exceed 12,500 megalitres in any water year.
- (3) Sufficient volumes of water must be set aside from assured inflows into the water source and reserves held in Wyangala Dam water storage or other water storages to provide for subclause (1) and subclause (2).

61 Minimum flow levels

A visible flow should be maintained in the Lachlan River at Geramy.

62 Water delivery and channel capacity constraints

Where necessary for determining extraction components, managing water releases or providing water under access licences, the maximum delivery capacity or operating channel capacity shall be determined and specified in accordance with procedures established by the Minister, taking into account:

- (a) inundation of private land or interference with access,
- (b) the effects of inundation on the floodplain and associated wetlands,
- (c) the transmission losses expected to occur,
- (d) capacities of water management structures controlled by the Department, and
- (e) the SWMOP targets.

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Note. Operation of the system at the commencement of this Plan has the following constraints on maximum flows:

- 6,600 ML/day between Wyangala Dam and Jemalong Weir (the valve capacity of Wyangala Dam)
- 2,600 ML/day between Jemalong Weir and Willandra Weir,
- 390 ML/day in the Wallamundry Creek system,
- 1,200 ML/day in Goobang/Bumbuggan Creeks,
- 500 ML/day in Willandra Creek,
- 2,400 ML/day between Willandra Weir and Merrowie Creek,
- 1,500 ML/day between Merrowie Creek and Torrigan split,
- 420 ML/day between Torrigan split and Booligal, and
- 310 ML/day downstream of Booligal.

63 Rates of change of releases from water storages

Rules regarding rates of change to releases from water storages should be specified in accordance with procedures established by the Minister, and should take into account:

- (a) relevant environmental considerations,
- (b) damage to river banks, and
- (c) public safety.

64 Dam operation during floods and spills

- (1) The operation of Wyangala Dam during times of flood and spilling of water is to be undertaken in a manner that maintains the safety of dam infrastructure.
- (2) Providing it is consistent with subclause (1), operation :
 - (a) should leave the storage as full as possible at the completion of the flood, subject to maintenance of a target airspace volume as specified in clause 65(b),
 - (b) should ensure the general rate of increase of outflow does not exceed the rate of increase of inflow, and
 - (c) should aim to lessening downstream flood damage, where possible.

65 Airspace operation rules

Airspace operation of Wyangala Dam shall be in accordance with the following rules:

- (a) airspace is to be maintained in Wyangala Dam for the purpose of reducing downstream flood damage,
- (b) the target airspace volume that is to be maintained at any time, shall be set so that the probability of the water storage volume being full, by the time significant irrigation demand commences, is at least 80%,
- (c) evacuation of airspace should not result in flow at Cotton's Weir, Forbes or at Jemalong Weir exceeding the minor flood level at these sites, and
- (d) when the Wyangala Dam water storage is within 1 percent of the airspace target, airspace evacuation releases are to be maintained at the Wyangala power station capacity, if practicable.

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Part 13 Monitoring and reporting

66 Monitoring

The monitoring of the performance indicators specified in clause 12 of this Plan shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with the water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51(5) of the Act, the Implementation Program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program are included in the annual report for the Department of Land and Water Conservation.

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Part 14 Amendment of this Plan

67 Changes to this water source

The Minister, under section 42 (2) of the Act and by notice published in the Gazette, may add a river or section of river to this water source or remove a river or section of river from this water source providing that:

- (a) any river or section of river that is added has been declared to be a regulated river by an order published in the Gazette, and
- (b) the Minister is satisfied that there shall be no impact on environmental water, or on the available water to any access licences in this water source.

68 Amendment of supplementary environmental water rules

- (1) Clause 15 (1) (a) may be amended under section 42 (2) of the Act.
- (2) Such an amendment is:
 - (i) only to occur following the Minister's consideration of the review under clause 15 (1) (j),
 - (ii) only affect the volume of inflows to Wyangala Dam water storage in any calendar year since 1 January that must be exceeded before translucent releases may be made from Wyangala Dam, and
 - (iii) may retain or decrease the volume but may not increase the volume.
- (3) The Minister should consult with the Minister for the Environment before making an amendment to the Plan under this clause.

69 Regulated River (conveyance) access licence rules

- (1) The Minister shall, under section 42(2) of the Act amend the Plan to:
 - (a) replace clause 26 with the volume of the share component of the regulated river (conveyance) access to be held by Jemalong Irrigation Limited at the commencement of this Plan,
 - (b) replace clause 41 with provisions specifying available water determination rules for regulated river (conveyance) access, and
 - (c) replace clause 47 (4) with provisions specifying:
 - (i) the maximum volume that may, at any time, be held in the accounts of regulated river (conveyance) access licences, and
 - (ii) the volume of water allocation that may be carried over from one water year to the next in the water allocation accounts of regulated river (conveyance) access licences.
- (2) The available water determination rules and water allocation account management rules referred to in subclause (1) should be such that, when applied to the volume of the share component of the access licence issued to Jemalong Irrigation Limited, they would provide water allocation volumes which, in the opinion of the Minister, reasonably replicate the volumes of water that would have been available to Jemalong Irrigation Limited under the conveyance loss conditions attaching to their licence under the Irrigation Corporation Act.

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- (3) The available water determination rules established for regulated river (conveyance) access licences must make provision for:
 - (a) the environmental water provisions established by this plan,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) requirements for regulated river (high security) access licences,
 - (g) allocations remaining in access licence water allocation accounts from previous available water determinations,
 - (h) water losses associated with the holding and delivery of water to meet the requirements identified in subclauses (a) to (g),
 - (i) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination, and
 - (j) any other relevant matters.
- (4) Action under subclause (1) should occur as soon as possible after gazettal of this Plan.

70 Amendment of rules relating to constraints within a water source

- (1) At any time after 1 July 2007, and following the completion of the review, specified in subclause (2) the Minister may, under section 42 (2) of the Act remove or reduce the prohibition on dealings specified in subclauses 51 (4), 51 (5) and 51 (6).
- (2) A review of the provisions specified in subclauses 51 (4), 51 (5) and 51 (6) should:
 - (a) commence in the first year of this Plan and be completed no later than the fifth year of this Plan,
 - (b) consider the appropriateness of the provisions against the objectives of this Plan,
 - (c) examine but not be limited to the following matters:
 - (i) possible social and economic impacts on local communities,
 - (ii) possible environmental impacts including seasonal flow reversal, salinity, channel stability, flow variability and habitat,
 - (iii) physical channel constraints,
 - (iv) any works that may be required to address physical channel constraints,
 - (v) pumping capacity,
 - (vi) relative impacts on different sections of the water source,
 - (vii) impact of trade on water allocation reliability and ability to meet daily water supply demands,

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- (viii) impact of transmission losses on water allocation reliability to regulated river (general security) access licences and the ability to meet daily water supply demands, and
 - (d) recommend whether the prohibitions should be retained, modified or fully removed.
- (3) The Minister may seek advice from a committee consisting of members from appropriate government agencies, local government, environmental interests, industry and the community before taking action under subclause (1).

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

airspace is a volume in a ***water storage***, which is kept empty for the purpose of mitigating potential floods.

assured inflows are the volumes of water which historic hydrologic information indicates are the minimum which can be expected to flow into the water source.

available water in relation to a water management area or water source, is the water that is available in that area or water source in accordance with an ***available water determination*** that is in force in respect of that area or water source.

available water determination is a written Order by the Minister as to the availability of water for the various categories of access licence in relation to a specified water management area or water source.

the Cap is as defined in Schedule F of the Murray Darling Basin Agreement.

conversion factor refers to the adjustment factor that may be applied to the size of share components when they are part of a dealing under 71B or 71E of the Act.

Department is the Department of Land and Water Conservation or its successor.

environmental contingency allowance is a volume of water held in storage from which releases are made for particular environmental purposes or in response to particular environmental circumstances.

extraction component is the extraction component of an access licence as defined in 56(1) of the Act.

floodplain harvesting is the collection or capture of water flowing across floodplains.

full supply volume is the volume of water held in a ***water storage*** at the storage level considered to be the limit for the purposes of storage of water, except in periods of flood operation.

long-term average annual extraction is the average of annual water extractions from the water source over the period for which an assessment is carried out.

Minister is the Minister for Land and Water Conservation. The Minister may delegate functions under section 389 of the Act.

Murray Darling Basin Agreement is the agreement between the Commonwealth of Australia and the states of New South Wales, Victoria and South Australia as referred to in the *Murray Darling Basin Act, 1992*, for the purpose of promoting and co-ordinating effective planning and management for the equitable, efficient and sustainable use of the water, land and other environmental resources of the Murray-Darling Basin.

private water management infrastructure includes pumps, on-farm dams and all other private infrastructure which affect the volume of water taken by access licences.

replenishment flows are flows provided to refill pools and water holes in effluent river systems downstream of the water source and provide water for household and town use and stock.

reserves are volumes of water put aside in a ***water storage*** to allow the supply of future water requirements.

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share component is the share component of an access licence as defined in 56(1) of the Act or, for the purposes of this Plan, any right to take water under the Water Act 1912 that gives rise to share component of an access licence under the Water Management Act 2000 (as amended).

supply capability is defined as the rate at which water that can be supplied to a section of a water source after satisfying the environmental water provisions and the requirements for water to satisfy basic land holder rights.

translucent release is the release from a **water storage** of some portion of inflow to the **water storage** coincident with the occurrence of that inflow.

water storage means a state owned dam, weir or other structure, which is used to regulate and manage river flows in this water source and the water body impounded by this structure.

water supply system includes the water storages and all other factors influencing water supply that are under the control of the Minister.

water use development includes all privately owned water management structures, and all aspects of farm, industry, town or private household development which affect the volumes of water taken from the water source, and the management practices that are applied in relation to them.

water year is defined as a 12 month period from 1 July to 30 June

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Schedule 2 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL contributes to target in full
 HIGH while not fully contributing to target, there is a good level of contribution
 PARTIAL goes some way to contributing to target
 LOW only small degree of contribution to target

Relevant Target	Level of contribution	Comments
Target 1a Extractions in Murray Darling Basin's regulated rivers limited to the level of the long term average annual extraction below the MDBMC Cap which results from the long term impact of the environmental water rules	FULL	<ul style="list-style-type: none"> Plan clearly sets out the basis for the long-term extraction limit
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon	FULL	<ul style="list-style-type: none"> Rules set out in Part 8
Target 2 All water management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes.	PARTIAL	<ul style="list-style-type: none"> Silver perch is a listed Threatened Species is thought to still occur in the Lachlan. Improvement in higher flows may assist its spawning and recruitment. The flow improvements should provide increased wetland inundation for a number of lower river wetlands eg Booligal, Murrumbidgee, Lake Merrimajee, Cumbung Swamp and Merrowie. An Environmental Contingency Allowance of 20,000 ML is provided. The plan substantially reduces environmental water when Wyangala Dam levels are reduced or water available to access licences restricted, irrespective of the environmental needs.
Target 4a Where the frequency of "end of system" daily flows would be less than 60 percent of the predevelopment level without environmental flow rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent of the predevelopment frequency.	PARTIAL	<ul style="list-style-type: none"> The frequency of flows up to the 20th percentile meet the target The frequency of flows between the 20th percentile and the 60th percentile do not meet the target. The frequency of flows above the 60th percentile meet the target.

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<p>Target 4b</p> <p>Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile.</p>	FULL	<ul style="list-style-type: none"> This Plan provides for maintenance of flow to end of system at level which is above the natural 95th percentile flow frequency (which is a zero flow)
<p>Target 4c</p> <p>The channel capacity of all lower river and effluent creek systems used for the delivery of regulated water determined. Subject to reasonable socio-economic impacts, limits on daily supply volumes established for effluent systems such that they do not exceed 80 percent of the channel capacity for more than 10 percent of days in each month of each year. Where daily supply volumes are currently substantially less than channel capacity, alternative limits established to reduce the impact of unseasonal flows arising from future access licence dealings.</p>	PARTIAL	<ul style="list-style-type: none"> This Plan provides for the determination of maximum operating channel capacities in accordance with the SWMOP target. This Plan also provides for the distribution of numerical extraction rights that could be used to facilitate management to desired capacity targets. The Plan also notes a number of maximum channel capacity constraints that would apply at the start of this Plan. However, these are only expressed as a Note and are therefore not part of the Plan.
<p>Target 5</p> <p>Access rights for water access licensees clearly and legally specified in terms of share and extraction components.</p>	HIGH	<ul style="list-style-type: none"> Access rights are specified and tradeable
<p>Target 12</p> <p>Measures in place in all water sources subject to a gazetted water sharing plan to protect basic domestic and stock water rights from the impact of other water access and use.</p>	FULL	<ul style="list-style-type: none"> Obligations are set out in Part 5
<p>Target 14</p> <p>Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them.</p>	LOW	<ul style="list-style-type: none"> The Plan does not address specific Aboriginal cultural or traditional requirements and has not identified any sites of particular importance. It is likely that the environmental flow rules in the Plan will contribute to protection.

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<p>Target 16a</p> <p>All share components of access licences tradeable.</p>	PARTIAL	<ul style="list-style-type: none"> All share components are tradeable. This Plan prohibits the movement of share component from upstream of Lake Cargelligo Weir to downstream of Lake Cargelligo Weir and vice versa. However it does provide for review and possible removal or modification of this restriction. The limits placed on movement of share component and allocation into Willandra Creek and the Lachlan downstream of Booligal have been put in place because of the potential environmental impacts that would result from changes in flow regimes resulting from increased regulated flow.
<p>Target 16c</p> <p>Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water</p>	FULL	<ul style="list-style-type: none"> Assignments between water sources are in line with Government policy
<p>Target 16d</p> <p>Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery</p>	FULL	<ul style="list-style-type: none"> The Plan does not impose reduction factors
<p>Target 16f</p> <p>Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit.</p>	PARTIAL	<ul style="list-style-type: none"> This Plan establishes dealing zones being upstream and downstream of Cargelligo Weir, downstream of Booligal and Willandra Creek.
<p>Target 35</p> <p>All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries.</p>	PARTIAL	<ul style="list-style-type: none"> This Plan included a general objective for ecosystem water quality. This Plan makes specific provision for water quality management through 20,000 Megalitre Water Quality Allowance for salinity and blue-green algae.

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Appendix 1 Rivers and lakes in the Lachlan Regulated River Water Source

- (1) At the commencement of this Plan the Lachlan Regulated River Water Source includes the following:
- (a) Ana Branch of Willandra/Billabong Creek, offtaking within portion 1, Parish of Gunagai, County of Blaxland,
 - (b) Bumbergan Creek from its confluence with the Lachlan River to its confluence with Goobang Creek,
 - (c) Carrawabbity Creek to the northern boundary of Portion 148, Parish of Carrawabbity, County of Ashburnham, from its junction with the Lachlan River,
 - (d) Goobang Creek from its confluence with Bumbergan Creek to its confluence with the Lachlan River,
 - (e) Island Creek from its upstream to its downstream confluences with the Lachlan River,
 - (f) Jemalong Creek from its confluence with the Lachlan River to the southern boundary of Portion 18, Parish of Tallabung, County of Forbes,
 - (g) Lachlan River, from the upper limit of Wyangala Dam storage downstream to the Murrumbidgee River, including all tributaries to the storage (named and unnamed) up to high water mark of the storage,
 - (h) Lake Brewster,
 - (i) Lake Cargelligo,
 - (j) Nerathong Creek from its confluence with Wallamundry Creek to its confluence with the Lachlan River,
 - (k) the channel or cutting connecting The Curlew Water and Lake Cargelligo,
 - (l) the channel or cutting connecting The Sheet of Water and The Curlew Water,
 - (m) The Curlew Water,
 - (n) the cutting connecting the Lachlan River with The Sheet of Water,
 - (o) the Lake Creek connecting Lake Cargelligo with the Lachlan River,
 - (p) The Sheet of Water,
 - (q) Torriganny Creek,
 - (r) Unnamed lagoon offtaking from the Lachlan River in portion W.I. 3882, Parish of Jundrie, County of Blaxland,
 - (s) Unnamed watercourse offtaking from the Lachlan River within portion 6, Parish of Hunthawong, County of Nicholson,
 - (t) Wallamundry Creek from its confluence with Island Creek to its confluence with the Lachlan River,
 - (u) Wallaroi Creek from its confluence with Wallamundry Creek to its confluence with the Lachlan River,

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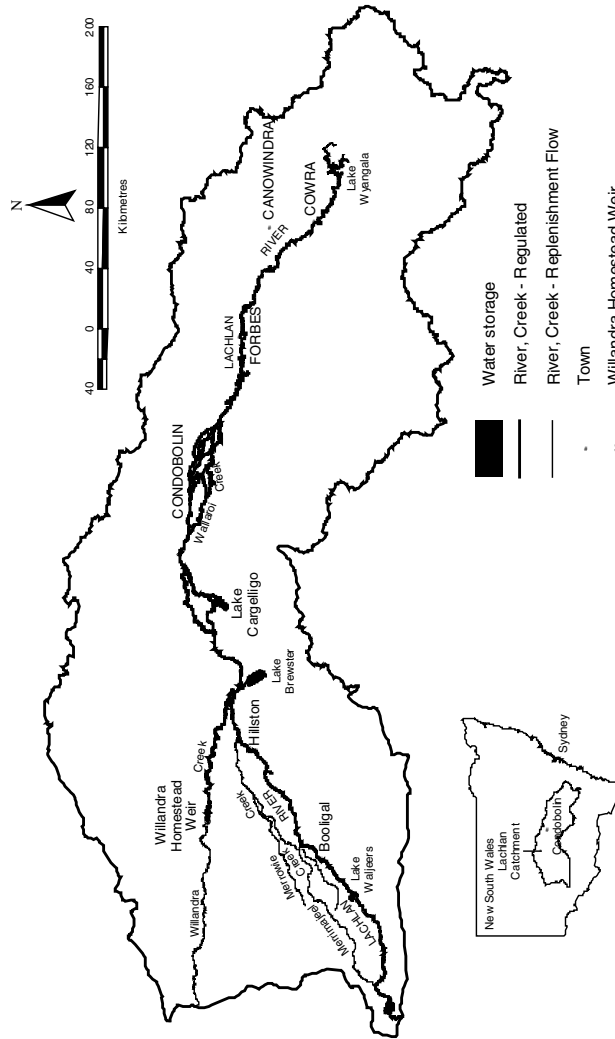
- (v) Willandra Creek from the offtake from the Lachlan River downstream to the Willandra Homestead Weir located on Portion 11, Parish of Bundunglong, County of Franklin and Portion 7, Parish of Warranary, County of Mossgiel,

Note. The following rivers receive domestic and stock replenishment flows from the water source, but do not, themselves, form part of this water source:

- Booberoi Creek,
- Willandra Creek below Willandra Homestead,
- Merrowie Creek,
- Merrimajeel Creek, and
- Muggabah Creek.

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Appendix 2 Lachlan Water Management Area



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Appendix 3 State floodplain harvesting principles

Section 1 Definition and categories of floodplain harvesting

- (1) Floodplain harvesting is the collection, extraction or impoundment of water flowing across floodplains. The floodplain flows can originate from local runoff that has not yet entered the main channel of a river, or from water that has overflowed from the main channel of a river during a flood. For the purposes of this policy the floodplain is defined as extending to the 1 in 100 year flood line.
- (2) Floodplain harvesting can generally be put into one of three categories:
 - (a) diversion or capture of floodplain flows using purpose built structures or extraction works to divert water into storages, supply channels or fields or to retain flows,
 - (b) capture of floodplain flows originating from outside of irrigated areas using works built for purposes other than floodplain harvesting. Examples are:
 - (i) levees and supply works such as off river storages constructed in billabongs or depressions that fill from floodplain flows, and
 - (ii) below ground level water channels from which the water is pumped into on farm storages, and
 - (c) opportunistic diversions from floodplains, depressions or wetlands using temporary pumps or other means.

Note. Capture of rainfall or runoff from farm irrigation fields, via tailwater systems or other means, is not floodplain harvesting.

Section 2 Floodplain harvesting management issues

- (1) The harvesting of water from floodplains reduces the amount of water reaching or returning to rivers. This decreases the amount of water available to meet downstream river health, wetland and floodplain needs and the water supply entitlements of other users.
- (2) Floodplain harvesting can seriously affect the connectivity between the local floodplain, wetlands and the river, through the loss of flow volume and redirection of water flows.
- (3) The *Water Act 1912* provided powers to license floodplain harvesting. However this was never applied as there was generally no requirement to restrict total overall water extractions or off-allocation diversions. Harvested floodplain water has been treated as a freely available bonus to a farmer's licensed entitlement.
- (4) This situation has now changed. The Murray-Darling Basin cap applies to all water diverted from inland NSW catchments and rivers. Licensed and off-allocation access has been subject to increasing restrictions. Embargoes on water licences are also in place on many areas on the coast.
- (5) Floodplain harvesting works and water extractions also clearly fall into those activities that the *Water Management Act 2000* requires to be only undertaken by way of a licence. The Act also requires such licensing to consider the ecological functioning of floodplains.
- (6) Floodplain harvesting can no longer be left outside of the State's water management and compliance system or as a source of increase in further water extractions. Given this, it

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is the Government's intention that floodplain harvesting works and taking of water from floodplains be licensed and managed. It will take a number of years to complete the process. However, the water sharing plans must signal the basic principles that will govern the process.

Section 3 Management of floodplain harvesting

- (1) Floodplain harvesting will not be a component of individual water sharing plans being produced for the regulated and unregulated rivers. During flood times water originating in one river system may flow across floodplains and along "flood runners" into adjacent river systems. It is therefore often not possible to assign an area of floodplain to a particular river.
- (2) Management of floodplain harvesting will occur on a state-wide basis, according to the six principles set out in section 4.
- (3) There are many thousands of existing floodplain works which will require licensing and this will be done over the next couple of years. The licensing process will include proper environmental impact assessments.
- (4) A separate category of licence will be established.

Section 4 Floodplain harvesting principles

- (1) Principle 1 is that all existing floodplain harvesting works and floodplain harvesting extractions will be licensed.
- (2) Principle 2 is that licensing will focus initially on controlling the structures, but with movement towards specifying volume limits and flow related access conditions, including metering of pumps

Note. While all surface and groundwater licences now (or will shortly) specify volume entitlements or annual limits to water, it is not possible to do this for floodplain harvesting licences at this stage. This is because the pattern of use is highly episodic and site and infrastructure specific, and current data on structures and use is minimal.

The Department of Land and Water Conservation will licence existing structures and specify monitoring of use (including metering of pumps) as a licence condition where possible. This may not be possible initially in cases where a tailwater system is also picking up floodplain water as they are difficult to separate, or where overland flow is being captured by a billabong for which we do not have any information on its capacity. Options for application of volumetric conditions will be developed and implemented where appropriate within the first five years of the initial water sharing plans.

- (3) Principle 3 is that no new works or expanded floodplain harvesting activities in the Murray-Darling Basin that will result in the diversion of additional water will be authorised.

Note. All new floodplain harvesting works are required by law to be licensed. However, as any new works would result in a growth in diversion, which would threaten river health and/or the water entitlements of others, such works would have to be offset by a reduction in other forms of water diversion.

- (4) Principle 4 is that floodplain diversions associated with works in place in the Murray-Darling Basin prior to the end of the 1994 irrigation season will be considered as within the NSW cap.

Note. Because cap is based on the use of water with development as it was in 1994, NSW considers that the water use that would result from use of the floodplain infrastructure in place in 1994, is part of the cap in each system.

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- (5) Principle 5 is that once licensing is completed, an assessment of long-term use resulting from authorised structures against that from structures which existed in 1994 will be carried out and appropriate steps taken to keep harvesting to cap levels.

Note. It is likely that there has been some growth in floodplain harvesting works and extractions since 1994. However, it is expected that the licensing process will result in some modification of existing works. This may be adequate to offset any post 1994 development. If not, restrictions on the use of the licensed works will have to be applied to return diversions to cap levels. Such restrictions could include restrictions on pumping times or a requirement to modify the work to allow a proportion of flows to be bypassed. By preventing the construction or enlargement of new works, the opportunity for any further growth in floodplain harvesting diversions will be minimised.

- (6) Principle 6 is that floodplain harvesting rights will not be tradeable.

Note. Trading of floodplain harvesting rights will not be permitted because the frequency and volume of use is site and infrastructure specific, and volume management will take some time to implement.

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Appendix 4 Performance indicators

Performance indicators for the Lachlan Regulated River Water Sharing Plan			
Performance indicator	Related objective	Assessed by	Commentary
(a) Change in ecological condition of this water source and dependent ecosystems.	clause 10 (a)	<ul style="list-style-type: none"> Monitoring of ecological response to changed flow regimes, under the Integrated Monitoring of Environmental Flows program (<i>IMEF</i>) (each water source will have specific hypotheses from the set developed under IMEF). Other relevant studies as may be undertaken in specific water sources. 	<ul style="list-style-type: none"> IMEF tests a number of hypotheses to indicate how elements of river ecology respond to different aspects of the flow regime (including Environmental Flow Rules, irrigation flows, and floods and wetland connectivity).
(b) Change in low flow regime.	clause 10 (a)	<ul style="list-style-type: none"> Number of days per water year where flow is below natural 95th and 80th percentiles. Average and maximum number of days per water year of continuous periods of flow which is below natural 95th and 80th percentiles. Measurement at end of system and specified key sampling sites. 	<ul style="list-style-type: none"> River Flow Objectives (RFOs) 1 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every RFO is relevant to every river in NSW. Analysis would need to incorporate reference to seasonal indicators. Long term modelling will reflect the influence of climate on flows. Appropriate data relating to flow distribution, such as summer/winter cropping balance, agronomical practices, on farm storage development, management and operation of environmental releases etc. Baseline should be the modelled water sharing plan scenario (rather than natural flows).
(c) Change in moderate to high flow regime.	clause 10 (a)	<ul style="list-style-type: none"> Number of days per water year where flow is above natural 30th, 15th and 5th percentiles. Average and maximum number of days per water year of continuous periods of flow which is above natural 30th, 15th and 5th percentiles. Measurement at end of system and other key sampling sites in this water source. 	<ul style="list-style-type: none"> RFO 3.

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Performance indicators for the Lachlan Regulated River Water Sharing Plan			
Performance indicator	Related objective	Assessed by	Commentary
(d) Change in water quality.	clause 10(a)(vi) clause 10(b)(iv) clause 10 (c) clause 10 (d)	<ul style="list-style-type: none"> Assessment and statistical analysis of key water quality parameters, and relationship to flow. 	<ul style="list-style-type: none"> The Plan rules will contribute to a long-term change in water quality by affecting flow regimes and flow management to address issues such as algal management. There are many non-water sharing plan related factors that affect water quality (eg land-based activities and thermal pollution).
(e) Extent to which basic landholder rights requirements have been met.	clause 10(b)(ii)	<ul style="list-style-type: none"> Basic rights allowances made according to plan provisions/implementation program requirements. Flows adequate to meet basic rights requirements (taking into consideration allowances for delivery). 	<ul style="list-style-type: none"> Basic rights usage figures in water sharing plans are estimated volumes (not actual use). Basic rights represents a very small proportion of water extraction in regulated systems.
(f) Extent to which local water utility and major utility requirements (where major utilities are involved in urban water provision) have been met.	clause 10 (b) clause 10 (c)	<ul style="list-style-type: none"> Percentage of years that reserves were adequate to satisfy local water utility water requirements. 	
(g) Change in economic benefits derived from water extraction and use.	clause 10 (b)	<ul style="list-style-type: none"> Change in regional gross margins versus annual total extractions based on year 1 benchmarks (as represented in IQQM). Movement of water to higher value crops as measured by increases in area and/or water taken by these enterprises versus lower value uses. Change in unit price of water transferred. Annual total volume of access licence assigned in each water year. 	<ul style="list-style-type: none"> There are many factors affecting economic status of a region, for example commodity prices, other sources of water (eg groundwater). The Performance Indicator is intended to isolate as much as possible the effects of water availability and price on the gross margin returns at a regional level. Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan provisions.

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Performance indicators for the Lachlan Regulated River Water Sharing Plan			
Performance indicator	Related objective	Assessed by	Commentary
(h) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	clause 10 (d)	<ul style="list-style-type: none"> Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of 5 years there should be relevant information collected for each water source, as a minimum requirement.
(i) Extent to which native title rights have been met.	clause 10 (d)	<ul style="list-style-type: none"> Native title rights allowances made according to plan provisions/implementation program requirements. 	

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Appendix 5 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

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dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

groundwater source means a water source specified in a groundwater management plan.

hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or
 - (b) the total volume of water allocations in water allocation accounts, or
 - (c) where relevant, the sum of limits on rates of extraction in extraction components.

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8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.
- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. As indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
 - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or

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- (b) if there is an outstanding debt under the Act in respect of the licence, or
 - (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
- (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.

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- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or

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- (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. As indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:

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- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
- (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:

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- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
 - (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
 - (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
 - (a) if either of the access licences is suspended under section 78 of the Act, or

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- (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
- (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.

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- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or
 - (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:

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- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Water Sharing Plan for the Karuah River Water Source 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

 Water Sharing Plan for the Karuah River Water Source 2003

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Water Sharing Plan for the Karuah River Water Source 2003

Water Sharing Plan for the Karuah River Water Source 2003

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Karuah River Water Source 2003* (hereafter *this Plan*).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* as amended (hereafter *the Act*).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2003 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Lower North Coast Water Management Area known as the Karuah River Water Source (hereafter *this water source*) as shown in Schedule 2.

Note. The Lower North Coast Water Management Area is shown on a map in Appendix 1.

Note. Maps referred to in this Plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2.

- (2) This water source is divided into the following management zones shown on the map in Schedule 2:
 - (a) the Telegherry River and all of its tributaries (hereafter *management zone 1*),
 - (b) the Karuah River and all its tributaries that enter the Karuah River upstream of Stroud weir, excluding Mammy Johnsons River (hereafter *management zone 2*),
 - (c) the Karuah River and all its tributaries that enter the Karuah River downstream of Stroud Weir, but upstream of the Booral flow monitoring site (hereafter *management zone 3*),

Note. At the commencement of this Plan, the flow monitoring site referred to in subclause 2 (c) is the Booral flow gauging station.

- (d) the Mammy Johnsons River and all its tributaries (hereafter *management zone 4*), and

- (e) the Karuah River and all its tributaries that enter the Karuah River downstream of the Booral flow monitoring site (hereafter *management zone 5*).

Note. At the commencement of this Plan, the flow monitoring site referred to in subclause 2 (e) is the Booral flow gauging station.

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Note. Specific conditions apply to dealings of individual daily extraction limits within these management zones.

5 Waters to which this Plan applies

- (1) The waters of this water source include all water occurring on the land surface shown on the map in Schedule 2 including, but not limited to:
 - (a) all rivers in this water source including, but not limited to, those nominated in Schedule 3, and
 - (b) all lakes and wetlands in this water source.
- (2) The waters of this water source exclude all water contained within aquifers underlying this water source.
- (3) The waters of this water source exclude all water determined by the Minister to be saline estuarine waters.

6 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.
- (2) Additional terms to those identified in subclause (1) are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible, the rules embodied in this Plan will apply to matters administered under the *Water Act 1912* in the interim.

8 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act, this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 4 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

Water Sharing Plan for the Karuah River Water Source 2003

Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

10 Vision

- (1) The vision for this Plan is to achieve a progressive, discernible and sustainable improvement in the quality of the Karuah River and its tributaries to deliver greater benefits in health, biodiversity, recreational attractiveness and economic productivity, achieved through implementation of a balanced water management plan.
- (2) This Plan also recognises the following respect statement for Aboriginal values in this water source:
 - (a) life-giving water is of extreme significance to Aboriginal culture for its domestic, traditional and spiritual values, and
 - (b) whilst water supplied for the environment will provide protection for native flora and fauna, water for fishing, food gathering and recreational activities, it is important that the community respects the spiritual significance of water to the Aboriginal people.

11 Objectives

The objectives of this Plan are to:

- (a) protect natural water level in pools during periods of low flows,
- (b) protect natural low flows,
- (c) protect or restore a proportion of moderate flows and high flows,
- (d) maintain or restore the natural inundation patterns and distribution of floodwaters supporting natural wetland and floodplain ecosystems,
- (e) maintain or imitate natural flow variability,
- (f) minimise the impacts of in-river structures,
- (g) maintain estuarine processes and habitats,
- (h) maintain water supply priorities for basic landholder rights,
- (i) supply town water to meet the existing and potential population needs of urban communities, conditional on water availability,
- (j) provide an agreed level of water sharing to maintain irrigation industry viability,
- (k) protect and enhance recreational and tourism opportunities,
- (l) recognise and protect traditional values of water to Aboriginal people,
- (m) protect and enhance recreational and commercial fishing interests,

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- (n) protect and enhance the oyster industry in the lower Karuah River, and
- (o) improve water quality parameters as a result of environmental flows at low flow periods.

Note. This objective refers to maintaining water quality. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in this Plan make a positive contribution to maintaining water quality.

12 Strategies

The strategies of this Plan are to:

- (a) establish cease (and commence) to pump levels and flow classes,
- (b) prevent the extraction of water from water pools if there is no visible flow in the vicinity of the pool,
- (c) limit the amount of water that can be extracted on a daily basis from different flow classes,
- (d) limit the long-term average extraction of water,
- (e) protect flows to enhance the operation of fishways (should they be constructed),
- (f) limit the number of new water entitlement applications that may be approved,
- (g) secure water access for towns up to the limit of their demand during low flow periods,
- (h) mitigate the impact on important industries that would be unable to adjust quickly to change by providing access to essential water during very dry periods,
- (i) ensure that water use will be accurately monitored,
- (j) clearly define access conditions for water extraction and rules for extracting water,
- (k) establish rules for determining the water available from time to time under access licences,
- (l) establish water allocation rules, and
- (m) specify access licence dealing rules that maximise flexibility for water users without adversely impacting on this water source.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flows,
- (b) change in moderate to high flows,
- (c) change in local water utilities access,

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- (d) change in ecological condition of this water source and its dependent ecosystems,
- (e) extent to which basic landholder rights have been met,
- (f) change in economic benefits derived from water extraction and use,
- (g) extent to which native title rights requirements have been met,
- (h) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (i) contribution to the achievement of water quality to support the environmental values of this water source.

Note. Appendix 3 details the objectives to which these performance indicators relate and the methods proposed for assessing these indicators.

Water Sharing Plan for the Karuah River Water Source 2003

Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (c) and 21 (e) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore river flow variability in this water source.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of water in this water source within the limits of water availability on a long-term average basis, and
 - (b) sharing of the flows that occur in this water source on a daily basis.

16 Extraction Management Unit

- (1) The availability of water for extraction from this water source on a long-term average basis will be determined at the level of an extraction management unit.
- (2) The extraction management unit of which this water source is part is known as the Karuah River Extraction Management Unit (hereafter *this Unit*) and is shown on the map in Schedule 5.

17 Flow classes

- (1) This Plan establishes the following flow classes as the basis for sharing of daily flows:
 - (a) very low flow class at or less than 5 megalitres per day (hereafter *ML/day*) on a rising river and at or less than 3.5 ML/day on a falling river,
Note. The 3.5 ML/day in subclause (a) corresponds to the estimated 88th percentile for all days of record in December, the critical month, and is referred to as the cease to pump on a falling river. The 5 ML/day corresponds to the 86th percentile for all days of record in December, and is referred to as the commence to pump on a rising river.
 - (b) A class flows greater than 5 ML/day and at or less than 18 ML/day on a rising river, and greater than 3.5 ML/day and at or less than 18 ML/day on a falling river,
 - (c) B class flows greater than 18 ML/day and at or less than 87 ML/day, and
 - (d) C class flows greater than 87 ML/day.**Note.** The flow classes have been determined based on flow information that inherently includes seasonal effects as well as evaporation and seepage losses.
- (2) Notwithstanding subclause (1), when supplementary environmental water provisions are activated, the very low flow class thresholds and the bottom of A class will increase to such an extent to satisfy the supplementary environmental water in accordance with clause 23.

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18 Flow reference point

For the purpose of this Plan, all flows referred to relate to the recorded flows at the flow reference point, as shown on the map in Schedule 2.

Note. As part of the implementation of this Plan the Minister may use, and, where necessary, establish monitoring sites at such points as are necessary to efficiently implement this Plan, and shall establish flow reference levels at these sites which are equivalent to the reference flows at the flow reference point.

19 Determination of flow class

Announcement of daily flow classes will be made from time to time by the Minister based on the flow at a flow gauging station, correlated to the flow reference point established in clause 18.

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Part 4 Environmental water provisions

20 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

21 Environmental health water

(1) Environmental health water is identified and established as follows:

(a) During years 1 to 5 of this Plan, in very low flows, the flow occurring in this water source minus 2.5 ML/day.

Note. The 2.5 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights, plus very low flow access for unregulated river access licences as specified in clause 45.

(b) During years 6 to 10 of this Plan, in very low flows, the flow occurring in this water source minus 2 ML/day.

Note. The 2 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights.

(c) In A class flows, the flow occurring in this water source on a rising river for 24 hours after the lower flow specified in clause 17 (1) (b) is exceeded minus 2 ML/day and thereafter the flow occurring in this water source minus 13 ML/day.

Note. The 2 ML/day is for basic landholder rights and the 13 ML/day is for basic landholder rights plus the A class TDEL of 11 ML/day.

(d) In B class flows, the flow occurring in this water source on a rising river for 24 hours after the lower flow specified in clause 17 (1) (c) is exceeded minus 13 ML/day and there after the flow occurring in this water source minus 28 ML/day.

Note. The 13 ML/day is for basic landholder rights plus the A class access and the 28 ML/day is basic landholder rights plus the B class TDEL of 26 ML/day.

(e) In C class flows, the flow occurring in this water source on a rising river for 24 hours after the lower flow specified in clause 17 (1) (d) is exceeded minus 28 ML/day and there after the flow occurring in this water source minus 33 ML/day.

Note. The 28 ML/day is for basic landholder rights plus B class access and the 33 ML/day is for basic landholder rights plus the C class TDEL of 31 ML/day.

Note. The total daily extraction limit for access licences in each flow class is established at clause 45.

Note. The 24 hour provision ensures the first flush of a rising river is allowed to pass before increased water extraction can commence.

(2) Environmental health water is maintained as follows:

(a) In very low flows:

(i) holders of access licences identified in the assessment process at clause 49 have restricted access to water during years 1 to 5 of this Plan,

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- (ii) holders of access licences identified in the assessment process at clause 49 are not permitted to access water during years 6 to 10 of this Plan,
- (iii) holders of all other access licences are not permitted access to water, and
- (iv) persons exercising domestic and stock and native title rights may take a combined total of up to 2 ML/day.

Note. The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment for reasons of public health, or to preserve basic landholder rights.

- (b) In A class flows:
 - (i) during years 1 to 5 of this Plan, holders of access licences determined by the process identified in clause 49 have restricted access to water in the first 24 hours after the A class lower flow level is exceeded on a rising river,
 - (ii) during years 6 to 10 of this Plan, holders of access licences determined by the process identified in clause 49 are not permitted access to water in the first 24 hours after the A class lower flow level is exceeded on a rising river,
 - (iii) the holders of all other access licences have no access to water in the first 24 hours after the A class lower flow level is exceeded on a rising river,
 - (iv) thereafter, the holders of access licences have restricted access to this flow class as specified in clause 45,
 - (v) persons exercising domestic and stock and native title rights may take water, and
 - (vi) if the water taken under domestic and stock and native title rights is assessed to be exceeding 2 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 50 to maintain the environmental water in this flow class.
- (c) In B class flows:
 - (i) the holders of access licences cannot access this flow class for the first 24 hours after the B class lower flow level is exceeded on a rising river,
 - (ii) thereafter, the holders of access licences have restricted access to the flow class as specified in clause 45,
 - (iii) persons exercising domestic and stock and native title rights may take water, and
 - (iv) if the water taken under domestic and stock and native title rights is assessed to be exceeding 2 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 51 to maintain the environmental water in this flow class.
- (d) In C class flows:

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- (i) the holders of access licences cannot access this flow class for the first 24 hours after the C class lower flow level is exceeded on a rising river,
 - (ii) thereafter, the holders of access licences have restricted access to the flow class as specified in clause 45,
 - (iii) persons exercising basic landholder rights may take water, and
 - (iv) if the water taken under domestic and stock and native title water rights is assessed to be exceeding 2 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 51 if this is necessary to maintain the environmental water in this flow class.
- (e) In all flow classes, limits are imposed on the availability of water in accordance with clauses 35 and 37, that protect a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction.

Note. These rules protect the water for the environment by limiting the rate of extraction of water in different flow ranges, thereby achieving the objectives of this Plan.

Note. This Plan recognises that the environmental health water provisions provide non-extractive benefits, including traditional Aboriginal spiritual, social, customary and cultural benefits, and improved water quality.

22 Extraction by water supply works

Notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only if there is visible flow in the river in the vicinity of the work.

23 Supplementary environmental water

- (1) At the commencement of this Plan, there is no water committed for specified environmental purposes in accordance with section 8 (1) (b) of the Act.
- (2) Pursuant to section 42 (2) of the Act, once the Stroud Weir fish passage is constructed and operational, supplementary environmental water is identified and established as follows:
 - (a) each year during the periods 1 June to 31 July and 1 October to 30 November, the very low flow and A class flow levels established in clause 17 (1) (a) and (b) should be increased to provide and maintain a 10 ML/day flow at Stroud Weir,
 - (b) these levels are to be maintained until no more than a 3 week, continuous period of flows greater than 10 ML/day occurs at the Weir for each period, or to the end of either period, at which time the very low flow and A class flow levels specified in clause 17 (1) (a) and (b) will reapply, and
 - (c) the Minister, in consultation with the Minister for Fisheries, may determine a lesser period than three weeks as established in subclause (b), if warranted.

Note. As part of the implementation of this Plan, an expert panel is reviewing the need for a fish passage device on the Weir and the maximum period required for it to operate effectively. This clause establishes the upper limit for the maximum period of restricted flow class access resulting from the operation of the fish passage.

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- (3) Supplementary environmental water is maintained as follows:
- (a) in the very low flow class, during years 1 to 5 of this Plan, the holders of access licences determined by the process specified in clause 49 have restricted access to water,
 - (b) in the very low flow class, during years 6 to 10 of this Plan, the holders of access licences determined by the process specified in clause 49 are not permitted access to water,
 - (c) in the very low flow class, all other access licences are not permitted to take water, and
 - (d) pursuant to clause 51, persons exercising domestic and stock and native title rights may take a combined total for the water source of up to 2 ML/day.

24 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their access licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the access licence, and
 - (c) shall be such as to ensure that there is a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

Water Sharing Plan for the Karuah River Water Source 2003

Part 5 Basic landholder rights

25 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

Note. The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment, for reasons of public health, or preserve basic landholder rights.

26 Domestic and stock rights

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights are estimated to be a total of 2 ML/day.
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in this water source and/or as a result of an increase of the exercise of basic landholder rights by existing landholders.

27 Native title rights

- (1) At the commencement of this Plan there are no holders of native title rights and therefore the requirements for native title rights are estimated to be a total of 0 ML/day.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note. Increase in use of native title rights may occur as a result of the granting of native title rights under the Commonwealth's *Native Title Act 1993*.

28 Harvestable rights

The requirement for water under harvestable rights is the amount of water owners of land are entitled to capture pursuant to the harvestable rights Order published in the NSW Government Gazette on 23 March 2001 under section 54 of the Act.

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Part 6 Bulk access regime

29 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (d) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climatic variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 9 Division 2 of this Plan,
 - (e) establishes rules according to which access licences are managed as provided for in Part 10 of this Plan, and
 - (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Parts 9 and 10 of this Plan.

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Part 7 Requirements for water under access licences

30 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The amount of water specified in this Part represents the total volumes specified on access licences in this water source. It is not a commitment to supply that water.

31 Estimate of water requirements

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, the requirements identified for water for extraction under licence within this water source will total approximately 3,360 megalitres per year (hereafter *ML/yr*).
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, there will be several runoff harvesting access licences in this water source, that will have their access licence share component expressed as the water that can be extracted from time to time from the approved works.
- (3) This Plan recognises that the total requirements for water for extraction within this water source may change during the term of this Plan as a result of:
 - (a) the granting, surrender, cancellation or non-renewal of access licences, or
 - (b) variations to local water utility licences arising from sections 66 (3) or 66 (4) of the Act.

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Part 8 Rules for granting access licences

32 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in this water source and the need to protect the ecological health of the river.
- (2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than access licences of the following kinds:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) an access licence resulting from an application of a type listed in section 82 (1) of the Act,
 - (c) unregulated river (Aboriginal cultural) access licences provided the total share components assigned to all licences in this category does not exceed 10 ML/yr, or
 - (d) unregulated river (research) access licences provided the total share components assigned to all licences in this category does not exceed 10 ML/yr.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share and extraction component sought will be the minimum required to meet that purpose and circumstance.
- (5) Subclause (4) does not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.
- (6) Any individual daily extraction limit (hereafter *IDEL*) granted in accordance with this clause cannot exceed the *IDEL* initially assigned to an equivalent share component for that category of access licence, as specified by clause 48.
- (7) In accordance with section 56 of the Act, all access licences in this water source shall have a share component expressed as a volume in ML/yr.
- (8) Notwithstanding subclause (7) runoff harvesting access licences may have the share component expressed either as a volume in ML/yr or in terms of the amount of water which can be extracted from time to time from specified works.

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Part 9 Limits to the availability of water

Division 1 Long-term average extraction limit

33 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

34 Extraction Management Unit

Management of the long-term average extraction of water from this water source will be undertaken in the context of this Unit, referred to in clause 16 (2).

35 Long-term average extraction limit

- (1) The long-term average extraction limit for this water source will be the total of:
 - (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in this water source, immediately prior to the commencement of Part 2 of Chapter 3 of the Act for this water source, and
 - (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in this Unit at the commencement of this Plan.

36 Variation of the long-term average extraction limit

The long-term average extraction limit of this water source may be varied by the Minister if, dealings under Part 11 result in the issuing or surrender of access licences in this Unit.

Division 2 Available water determinations

37 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
 - (a) water extraction in this Unit will be monitored in each water accounting year to determine if there is any growth in volumes extracted above the long-term average extraction limit specified in clause 35, based on comparison of the long-term average extraction limit against the average extraction within this Unit over that year and the preceding 2 years,
Note. A water accounting year is defined in clause 42 (3).
 - (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in a river for environmental purposes, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
 - (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work,

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- (d) for all access licences, an initial available water determination, of such volume of water as is equivalent to two times the access licence share component, should be made on 1 July 2003, and such determination should apply for one water accounting year,
- (e) from 1 July 2004, available water determinations for local water utility and domestic and stock access licences should be of such volume of water as is equivalent to the access licence share component, with priority given to making this water available above the making of water available to all other categories of access licence, and such determinations should be made annually,
- (f) from 1 July 2004, available water determinations for unregulated river access licences, including all subcategories, should be such volume of water as is equivalent to the access licence share component, except as provided in subclauses (g) and (h), and such determinations should be made annually,
- (g) if the 3 year average of extraction in this Unit exceeds the long-term average extraction limit established in clause 35 by 5% or greater, then the available water determination for the following water accounting year for unregulated river access licences in this water source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
- (h) if the 3 year average of extraction in this Unit is less than 95% of the long-term average extraction limit established in clause 35, the available water determination for unregulated river access licences in this water source shall be increased to such an extent as to allow extraction to increase to that long-term average extraction limit,
- (i) notwithstanding subclause (h), the available water determination should not exceed 100% of the total access licence share components,
- (j) a new available water determination for unregulated river access licences determined under subclause (g) or (h) should be repeated for each of the subsequent two water accounting years unchanged in quantity, and
- (k) available water determinations for runoff harvesting access licences should be made annually and should be either the access licence share component or the water that can be extracted from time to time from the approved works, depending on the manner in which the share component is expressed on the licence.

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Part 10 Rules for managing access licences

Division 1 General

38 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b) and 21 (a) and 21 (c) of the Act, having regard to:

- (a) the environmental water rules established in Part 4 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 5 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 7 of this Plan.

Division 2 Water allocation account management

39 Water allocation account management

This Division is made in accordance with sections 20 (2) (b) and 21 (c) of the Act.

40 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.

Note. Water allocations may be assigned to, or from, these accounts by a water allocation assignment made under section 71G of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Note. Water allocations may also be credited to these accounts in accordance with section 76 of the Act, subject to the operation of a return flows scheme established under section 75 of the Act.

41 Accrual of water allocations

Water allocations will be accrued into water allocation accounts in accordance with the Minister's available water determinations as specified in clause 37.

42 Annual accounting for water extraction

- (1) Water taken from this water source will be accounted for at least annually.
- (2) Water extracted by a water supply work nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) The maximum water allocation that can be carried over from one water accounting year to the next is as follows:
 - (a) 100% of the access licence share component from 2003/4 to 2004/5,
 - (b) 200% of the access licence share component from 2004/5 to 2005/6, and
 - (c) thereafter, the sum of the previous two available water determinations.

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- (5) Notwithstanding subclause (4) total water in any water allocation account cannot exceed 3 times the share component of the access licence:
 - (a) plus any water allocations acquired from another access licence by a water allocation assignment under section 71 G of the Act in that year,
 - (b) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (c) minus any water allocations assigned to another access licence by a water allocation assignment under section 71G of the Act in that year.
- (6) In any one water accounting year, water taken from this water source under an access licence may not exceed a volume consisting of:
 - (a) twice the water allocation accrued under the access licence that year,
 - (b) plus any water allocations assigned from another access licence by a water allocation assignment under section 71 G of the Act in that year,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (d) minus any water allocations assigned to another access licence, by a water allocation assignment under section 71 G of the Act in that year.
- (7) A water allocation account shall remain at or above zero at all times.

43 Three year accounting for water extraction

- (1) Water taken from this water source in any 3 consecutive water accounting years under an access licence may not exceed a volume consisting of:
 - (a) the water allocations accrued under the licence in those years,
 - (b) plus any water allocations assigned from another access licence by a water allocation assignment under section 71 G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another access licence, by water allocation assignment under section 71 G of the Act in those years.
- (2) Notwithstanding subclause (1), water taken under an access licence from this water source in the first 3 water accounting years of this Plan may not exceed a volume consisting of:
 - (a) 3 times the share component of the access licence,
 - (b) plus any water allocations assigned from another access licence by a water allocation assignment under section 71G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another access licence, by a water allocation assignment under section 71G of the Act in those years.

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Division 3 Sharing flows on a daily basis

44 Sharing flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act.

45 Total daily extraction limits

- (1) This Plan establishes a total daily extraction limit (hereafter *TDEL*) for each flow class as follows:
 - (a) during years 1 to 5 of this Plan, 0.5 ML/day for the very low flow class,
 - (b) during years 6 to 10 of this Plan 0 ML/day for the very low flow class,
 - (c) 11 ML/day for A class,
 - (d) 26 ML/day for B class, and
 - (e) 31 ML/day for C class.

Note. These flows represent 10% of the very low flows during years 1 to 5, 60% of the top of A class flows, 30% of the top of B class flows and for C class flows 37% of the 50th percentile flows in the critical month of December.

- (2) The TDEL for each flow class specified in subclause (1) applies to all rivers within this water source apart from those rivers identified as minor streams in a harvestable rights Order made under section 54 of the Act.

Note. The harvestable rights Order applying to this area at the commencement of this Plan is that gazetted on 23 March 2001 under section 54 of the Act. It identifies minor streams as non-permanent 1st and 2nd order streams as shown on topographic maps.

46 Initial assignment of the TDEL to categories of access licence

The TDEL for each flow class will initially be assigned to categories of access licences according to the following:

- (a) Domestic and stock access licences:
 - (i) 0 ML/day of very low flow access,
 - (ii) 0.2 ML/day of A class,
 - (iii) 0.2 ML/day of B class, and
 - (iv) 0.2 ML/day of C class.
- (b) Local water utility access licences:
 - (i) 0 ML/day of very low flow access,
 - (ii) 1.5 ML/day of A class,
 - (iii) 2.2 ML/day of B class, and
 - (iv) 2.2 ML/day of C class.
- (c) Unregulated river access licences:
 - (i) pursuant to clause 49, 0.5 ML/day of the very low flow class during years 1 to 5 of this Plan,
 - (ii) pursuant to clause 49, 0 ML/day of the very low flow class during years 6 to 10 of this Plan,
 - (iii) 8.8 ML/day of A class,

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- (iv) 23.1 ML/day of B class, and
- (v) 27.6 ML/day of C class.

Note. Clause 49 specifies the provisions under which IDELs may be assigned in the very low flow class to access licences assessed as eligible.

47 Unassigned TDEL

At the commencement of this Plan, unassigned TDEL in each flow class is as follows:

- (a) 0 ML/day of the very low flow class,
- (b) 0.5 ML/day of A class,
- (c) 0.5 ML/day of B class, and
- (d) 1.0 ML/day of C class.

Note. Unassigned TDEL may vary as a result of the surrender or cancellation of an access licence's IDELs, or in the operation of Part 8 of this Plan.

48 Daily extraction limits for individual access licence holders

- (1) Each access licence requiring an IDEL, as specified in Part 12 of this Plan, is assigned the same proportion of the TDEL, specified in clause 46 as its share component bears to all the share components of licences of that category.
- (2) Notwithstanding subclause (1), the assignment of IDELs to eligible unregulated river access licences in the very low flow class will be determined in accordance with clause 49,
- (3) Subclause (1) should apply as follows,
 - (a) A class IDELs should be assigned as soon as possible after the commencement of this Plan, and
 - (b) B and C class IDELs should be assigned once the total daily extraction of water by access licences during the period of B class flows equals or exceeds 25 ML/day on any day.
- (4) Notwithstanding subclauses (1) and (2), in relation to those access licences that are currently excluded from a flow class or part of a flow class by existing conditions on the access licence or the water supply work nominated by the access licence, the IDEL resulting from subclause (1) will be adjusted to reflect as far as possible such an exclusion.

49 Daily extraction limits for the very low flow class

- (1) The Minister may assign the TDELs for the very low flow class during years 1 to 5 of this Plan, as identified in clauses 45 (a) and 46 (c) (i) to unregulated river access licences in place at the commencement of this Plan and following an assessment of water requirements for the following agricultural purposes:
 - (a) cleaning of dairy plant and equipment for the purpose of hygiene,
 - (b) poultry misting,
 - (c) cleaning of enclosures used for intensive animal production for the purposes of hygiene, or

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- (d) essential human health and hygiene.
- (2) The Minister should cause the assessment in subclause (1) to be completed by no later than one year following the commencement of this Plan.
- (3) Pursuant to clause 46 (c) (i), the maximum TDEL that may be shared between access licences eligible for access to the very low flow class during years 1 to 5 of this Plan is 0.5 ML/day.
- (4) All access to the very low flow class by unregulated river access licences will cease during years 6 to 10 of this Plan.
- (5) In undertaking the assessment in subclause (1), the Minister should:
 - (a) consult with the Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the results of the assessment,
 - (iii) a Schedule of unregulated river access licences that are deemed eligible to access the very low flow class,
 - (iv) the minimum cumulative TDEL required to satisfy the needs of those access licences eligible to access the very low flow class, and
 - (v) the socio-economic impacts of the recommendation.
- (6) Any access licence assigned TDELs in the very low flow class during years 1 to 5 of this Plan that is surrendered, not renewed, cancelled or assigned elsewhere shall be removed from the Schedule established in subclause (6) (b) (iii) and the TDEL assigned in clauses 45 (a) and 46 (c) (i) reduced accordingly.

50 Granting of unassigned TDEL

- (1) Any unassigned TDEL may be assigned to access licences in the following circumstances:
 - (a) where they are applied for as part of a new access licence application,
 - (b) to a local water utility access licence where the Minister varies the access licence in accordance with sections 66 (3) or 66 (4) of the Act, or
 - (c) to existing access licences for the purpose of pumping into farm dams if:
 - (i) the purpose of the additional IDEL sought is established by the proponent,
 - (ii) the IDEL sought is the minimum required to satisfy that purpose, and
 - (iii) the extraction is consistent with the objectives and principles of this Plan.
- (2) Where additional IDELs are assigned to an access licence in accordance with this clause, the amount of IDEL so assigned shall be determined by the Minister consistent with the ratios of share component to IDEL for the specific category of access licence as initially assigned under clause 48.

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51 Adjustment to TDELS and IDELS

- (1) Where IDELS are assigned under clauses 49 and 50 any unassigned TDEL is reduced accordingly, and the TDEL assigned to the appropriate access licence category in clause 46 is increased accordingly.
- (2) Pursuant to section 42 (2) of the Act, if total extraction of water under domestic and stock or native title rights exceeds the volume specified in Part 5 of this Plan:
 - (a) first any unassigned TDEL then, if necessary, the TDEL for unregulated river access licences in clause 46 (c) shall be diminished to allow these additional basic landholder rights to be met, and
 - (b) the IDELS of each unregulated river access licence will then be reduced to comply with this diminished TDEL.
- (3) Pursuant to section 42 (2) of the Act, if any unassigned TDEL cannot meet either:
 - (a) the IDEL requirements of applicants for new access licences for unregulated river (Aboriginal cultural) access or unregulated river (research) access, or
 - (b) a local water utility's IDEL requirements,then the TDEL for unregulated river access licences in clause 46 (c) will be diminished to such an extent as to allow those requirements to be met.
- (4) Following an adjustment to the TDEL for unregulated river access licences in subclause (3) the IDELS of each unregulated river access licence will then be reduced to comply with this diminished TDEL.
- (5) Any adjustment to unregulated river access licence IDELS arising from this clause will be done at intervals of no greater than 5 years.
- (6) If water that pursuant to an access licence:
 - (a) is committed to adaptive environmental water, then the TDEL for classes specified on the committed access licence in the specified category will be reduced by the IDEL on the access licence so committed and clauses 45 and 46 adjusted accordingly, or
 - (b) is uncommitted to adaptive environmental water, then the TDEL for classes specified on the committed access licence in the specified category will be increased by the IDEL on the access licence so uncommitted and clauses 45 and 46 adjusted accordingly.

52 Administrative arrangements for managing access to daily flows

- (1) Notwithstanding the forgoing provisions of this Division, this Plan allows group management of access licences with respect to IDELS.
- (2) The Minister may determine that, from the commencement of this Plan and until otherwise determined:
 - (a) all access licences with IDELS shall be made part of a group maintained by the Minister, and
 - (b) access licences with IDELS will be assessed as a whole against their combined IDELS.
- (3) At any time when subclause (2) does not apply:

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- (a) access licence holders may make a request to form a group for their access licences,
 - (b) access licence holders may have their access licence removed from a group, in which case they shall be permitted to extract under that licence a maximum of the licensed IDEL, and
 - (c) where an access licence is removed or added to a group, the group combined IDEL shall be adjusted by the amount of IDEL on the subject licence.
- (4) Groups will be managed according to the following rules:
- (a) daily extraction by a group cannot exceed the combined IDELs of all access licences in the group,
 - (b) where it been assessed that a holder of an access licence within a group is repeatedly causing the combined IDEL to be exceeded then the Minister may remove that access licence from the group,
 - (c) where daily extraction by a group exceeds the combined IDELs of all access licences in the group, then the Minister may dissolve the group and require each access licence holder to comply with the licensed IDELs,
 - (d) should a holder of an access licence which is part of a group commit the IDELs of that licence to the environment consistent with section 8 (1) (c) of the Act, then those IDELs shall be removed from the group,
 - (e) an access licence may not be in more than one group, and
 - (f) the Minister may refuse to allow an access licence to be included in a group, and may refuse a request to form a group.

53 Infrastructure failure

In the event of infrastructure failure, the Minister can elect to:

- (a) continue to announce the current flow class,
- (b) announce another flow class based on climatic conditions and any other flow gauging information, or
- (c) restrict access to water to the lowest flow class.

Note. Infrastructure is defined in the dictionary.

Note. If satisfied that it is necessary to do so in the public interest, the Minister may direct the holders of an access licence to cease using a water supply work in accordance with section 323 of the Act.

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Part 11 Access licence dealing rules

54 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

Note. The Minister's access licence dealing principles are contained in Appendix 4.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. There are a number of mechanisms within the Act, called access licence dealings, to change either the ownership of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised. These dealings are governed by the principles in section 5 of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

55 Rules relating to constraints within this water source

- (1) This clause applies to any relevant dealings under sections 71D, 71F and 71J of the Act, and with respect to water allocation assignments within this water source under section 71G of the Act.

- (2) Dealings are prohibited under this clause if:

- (a) any of the access licences or water allocations involved are not within this water source,

Note. Clause 57 relates to any dealings that involve an access licence moving from one water source to another.

- (b) the dealing relates to new licence categories specified in clause 32 (3),
- (c) the dealing results in the TDEL in the receiving management zone exceeding 10% of the TDEL existing at the time of the commencement of Part 2 of Chapter 3 of the Act, unless the dealing is:
 - (i) from management zone 1 to management zones 2, 3 or 5,
 - (ii) from management zone 2 to management zone 3 or 5,
 - (iii) from management zone 3 to management zone 5, or
 - (iv) from management zone 4 to management zone 3 or 5.

Note. The management zones are shown in Schedule 2. These provisions facilitate the trading of IDELs in a downstream direction, and limit the potential change to daily river flow that could occur from dealings in an upstream direction.

- (3) Dealings that assign water allocations between access licences inside this water source are permitted.
- (4) Dealings under this clause may be subject to a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that

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protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

56 Rules for access licence dealings which alter the times, rates or circumstances specified in access licence extraction components

Notwithstanding clause 55, applications under section 71F of the Act to vary the times, rates or circumstances specified in an access licence with respect to the taking of water under the access licence are prohibited.

57 Rules for change of water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.

- (2) Dealings under section 71E of the Act are prohibited in this water source, unless provided for in this clause.
- (3) An access licence with a share component specifying this water source may be cancelled and a new access licence issued in another water source, only if the access licence dealing rules in the other water source permit such a dealing.
- (4) An access licence with a share component specifying another water source may be cancelled and a new access licence issued in this water source under this dealing only if:
- (a) the access licence dealing rules in the other water source permit such a dealing, and
 - (b) IDELs have been assigned to access licences in this water source.
- (5) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.
- (6) The extraction component of the cancelled access licence is not to be carried over to the new access licence.

58 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category may be permitted only if:
- (a) the conversion is from an unregulated river access licence to a runoff harvesting access licence,
 - (b) the conversion is from a runoff harvesting access licence to an unregulated river access licence,
 - (c) the conversion is from a domestic and stock access licence to an unregulated river access licence, or

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- (d) the conversion is from an unregulated river access licence to a domestic and stock access licence.
- (3) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

59 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of this water source are prohibited.

60 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71G of the Act, in relation to water allocation assignments between water sources.
- (2) Dealing under section 71G of the Act that result in water allocation assignments to or from access licences in this water source are prohibited unless provided for in this clause.
- (3) Dealings that assign water allocations between access licences inside this water source and access licences outside this water source are permitted only if the access licence dealing rules in the other water source permit such a dealing.

Note. Each water allocation assignment must be applied for. Licence holders may enter into private contracts to assign water allocations for a number of years. Such contracts are not guaranteed by the Government, and approval must be sought annually. Approval will be subject to the rules in this Plan, including local impact assessment.

61 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Dealings that result in interstate assignment of water allocations to or from this water source are prohibited.

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Part 12 Mandatory conditions

62 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
- (2) All access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence, including IDELs arising from the operation of Part 10 Division 3 of this Plan where applicable, and the variation thereof,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to the water allocation account management rules established in Part 10 Division 2 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account,
 - (f) the requirement that water may only be taken under the access licence by the water supply work nominated by the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.

63 Unregulated river access licences

All unregulated river access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group, and
- (b) notwithstanding subclause (a), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.

64 Local water utility access licences

All local water utility access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of supplying water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act,

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- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, and
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.

65 Domestic and stock access licences

All domestic and stock access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

66 Runoff harvesting access licences

All runoff harvesting access licences shall have a mandatory condition imposed on them specifying that water may be taken without restriction in rate, but only from the specified work.

67 Unregulated river (Aboriginal cultural) access licences

All unregulated river (Aboriginal cultural) access licences shall have mandatory conditions to give effect to the following:

- (a) water shall only be taken for Aboriginal personal, domestic and communal purposes including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, hunting, fishing and gathering, and for recreational, cultural and ceremonial purposes,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

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68 Unregulated river (research) access licences

All unregulated river (research) access licences shall have mandatory conditions to give effect to the following:

- (a) water shall only be taken for the purpose of scientific research, experimentation or teaching by accredited tertiary institutions, government bodies or other approved organisations, where any primary production resulting from the research program is not sold for profit,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

69 Mandatory conditions on water supply works approvals

All approvals for water supply works in this water source shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:

- (a) flow measurement devices:
 - (i) shall be installed and maintained on all works used for extraction of water under an access licence, and
 - (ii) shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
- (b) water extraction and property water management infrastructure details shall be provided to the Minister on request,
- (c) it is the responsibility of the work approval holder to ascertain from the Minister the flow class at any time before commencing to take water under an access licence with an IDEL,
- (d) notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is not permitted if there is no visible flow in the river in the vicinity of the work, and
- (e) extraction under an access licence through an approved work is only authorised with respect to the work nominated by the access licence.

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Part 13 Granting and amending water supply works approvals

70 Granting and amending water supply works approvals

This Part is made in accordance with section 21 (b) of the Act.

71 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence share component specifying the runoff harvesting dam as the nominated work.
- (2) When the share component that may be taken from a runoff harvesting dam are reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 11 of this Plan, the Minister may impose an additional condition requiring the works to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the works to be reduced, consistent with the reduction in share component available.

Note. Extraction of water from a runoff harvesting dam requires a runoff harvesting access licence, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required. Runoff harvesting is a category of access licence to be established by regulation under section 57 (k) of the Act.

72 In-river dams

No new in-river dams shall be approved within this water source.

Note. Taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act.

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Part 14 Monitoring and reporting

73 Monitoring and reporting of performance indicators

The monitoring and reporting of the performance indicators specified in clause 13 shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with a water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the implementation program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program will be included in the annual report for the Department of Land and Water Conservation.

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Part 15 Amendment of this Plan

74 Amendment of this Plan

This Part is made in accordance with section 42 (2) of the Act.

75 Amendment of very low flow provisions

- (1) The Minister may, under section 42 (2) of the Act and by notice published in the NSW Government Gazette, vary the very low flow levels established in clause 17, and consequently the bottom of A class established in clause 17, following field verification.
- (2) Any variation made under subclause (1) should not result in the 3.5 ML/day level (cease to pump) being less than 4 ML/day or being greater than 9 ML/day inclusive, with the 5 ML/day commence to pump flow level adjusted by an equal volume.
- (3) The Minister should cause the field verification in subclause (1) to be undertaken as soon as practical, but before the review of this Plan under section 43 (2) of the Act.
- (4) The field verification should assess the degree to which the following objectives of the are met:
 - (a) Objective 1 - to protect water levels in natural river pools and wetlands during periods of no flow, and
 - (b) Objective 2 - to protect natural low flows.
- (5) In undertaking the field verification the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the field results and conclusions in terms of the degree to which the objectives in subclause (4) are met,
 - (iv) the flow level recommended to meet the objectives in subclause (4), and
 - (v) the socio-economic impacts of recommended changes to the flow level.

76 Review of field verification

- (1) The Minister should seek advice from a review body on the field verification report specified in clause 75 (5) (b) before varying this Plan in accordance with clause 75 (1), if the field verification recommends a variation in the very low flow levels established in clause 17.
- (2) This review body may be:

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- (a) a water management committee with water sharing responsibilities for this water source if one exists,
 - (b) an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a water management committee referenced at subclause (2) (a), or
 - (c) if there is no water management committee with water sharing responsibilities for this water source, then by a catchment management board with responsibilities for this water source or an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a catchment management board.
- (3) The review body should provide advice to the Minister on the field verification report, and advise on any changes to the recommendations contained in the report in relation to any variation of the very low flow levels.
- (4) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date at the latest.

77 Other amendments of this Plan

This Plan can be amended in accordance with the following clauses of this Plan:

- (a) clause 23 in respect to supplementary environmental water,
- (b) clause 49 in respect to very low flow TDELS, and
- (c) clause 51 in respect to adjustments to TDELS and IDELS.

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

account water is the balance in an access licence water allocation account at a particular time.

Note. A access licence water allocation account records water allocations accrued under the licence as well as water allocations taken, assigned, or re-credited. The operation of the account is also governed by rules for the carrying over of credits from one accounting period to the next and rules for the maximum credit that may be allowed to accumulate in the account as established in a water sharing plan. Water allocations are the shares of available water accrued under an access licence from time to time as a result of available water determinations.

conversion factor refers to the adjustment factor that is to be applied to share components when they are cancelled or reissued in a different water source and visa versa, or when the licence category is changed. It is designed to provide for the fact that the value of a unit of share component in terms of the average water allocations that result from it may vary from one water source to another, or from one category of licence to another.

endangered ecological communities means ecological communities listed in Schedule 1 of the *Threatened Species Conservation Act 1995* or Schedule 4 of the *Fisheries Management Act 1994*.

extraction limit is a limit on the amount of water that may be extracted from this water source.

extraction management unit is a group of water sources for the purpose of managing annual average extraction.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs. See also **in-river dam** and **runoff harvesting dam**.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) very low flows may be a class on their own,
- (b) low flows may be categorised as 'A' class,
- (c) moderate flows may be categorised as 'B' class,
- (d) high flows may be categorised as 'C' class,

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

individual daily extraction limit (IDEL) is the volume of water that may be extracted by an individual access licence from an unregulated river on a daily basis from a particular flow class.

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infrastructure includes, but is not limited to, a:

- (a) flow gauging device or any other appliance that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated, or
- (b) flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within this water source.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher order rivers are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a “river” gazetted 23rd March 2001. See also *farm dam* and *runoff harvesting dam*.

management zone is an area within the water source in which daily extraction limits may be defined or where dealing restrictions are approved. Management zones may be designated where the water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area. They may also be designated where local dealing restrictions are in place.

runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a river gazetted 23rd March 2001. See also *farm dam* and *in-river dam*.

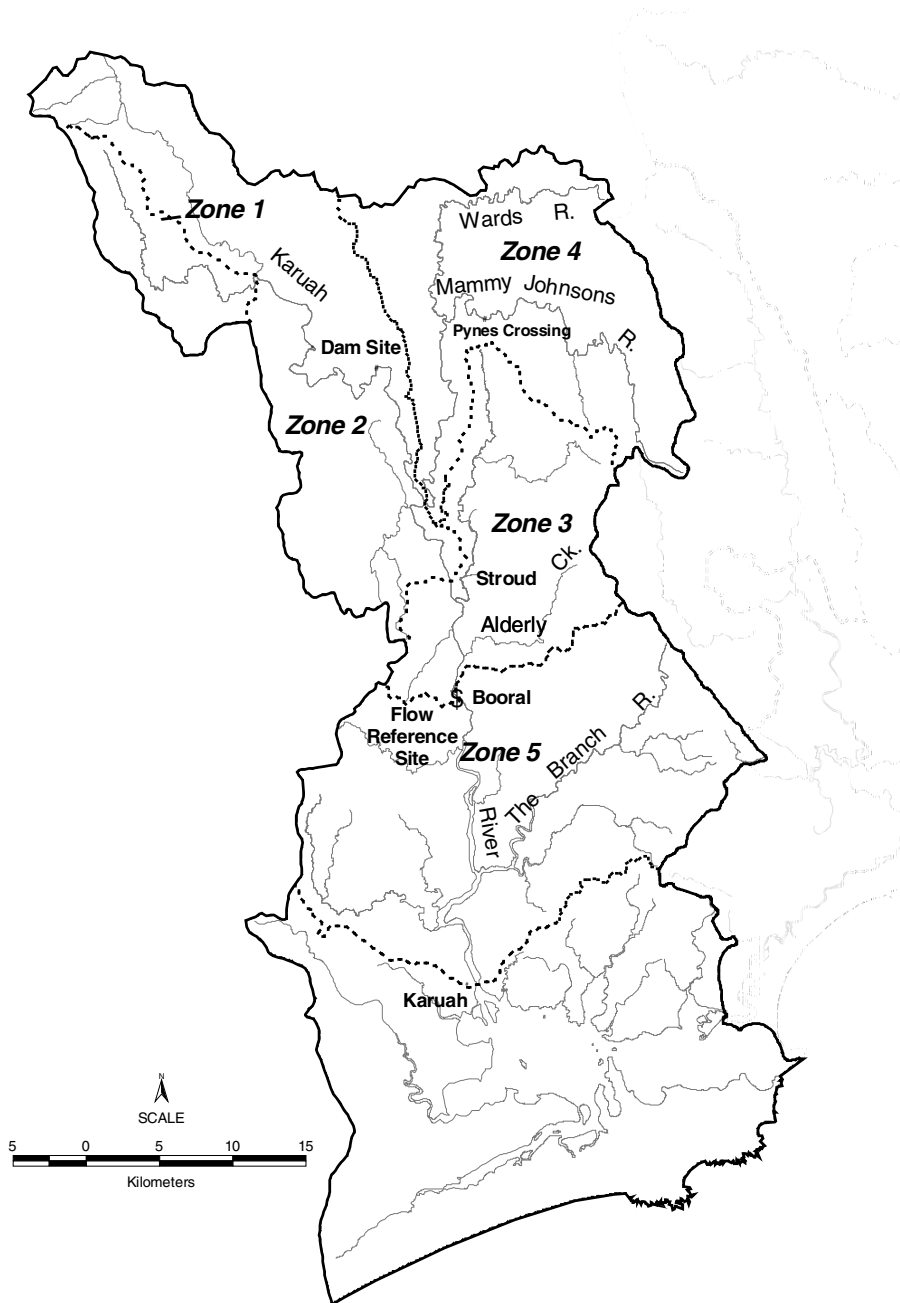
Note. This order refers to watercourses shown as blue lines on topographic maps. The lines which are uppermost in a catchment are 1st order streams, when two 1st order streams are joined they make a 2nd order stream, etc. For more information see the Farm Dams Assessment Guide available from the Department of Land and Water Conservation.

total daily extraction limit (TDEL) is the volume of water that may be extracted under access licences from an unregulated river on a daily basis from a particular flow class.

water accounting year is any 12 month period commencing on 1 July.

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Schedule 2 Karuah River Water Source



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Schedule 3 Rivers in the Karuah River Water Source

This water source includes:

Karuah River	Wards River
Alderley Creek	Sandy Gully
Barnes Creek	Mill Creek
Black Soil Creek	Saggers Creek
Booral Creek	Lamans Creek
Bulga Creek	Mosions Creek
Bundabah Creek	Ramstation Creek
Station Creek	Reedy Creek
Camerons Creek	Telegherry River
Cromarty Creek	Scotters Creek
Crystal Creek	Limestone Creek
Cherry Tree Creek	Snapes Creek
Deep Creek	Sugar Loaf Creek
Duckhole Creek	Andersons Creek
Hobarts Creek	The Branch River
Kore Kore Creek	Lewis Creek
Lawlers Creek	Tilligerry Creek
Lillipilli Creek	Twelve Mile Creek
Limeburners Creek	Washpool Creek
Mammy Johnsons River	Yalimbah Creek
Chainy Flat Creek	

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Schedule 4 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL – contributes to target in full

HIGH - while not fully contributing to target is considered a good level of contribution

PARTIAL - goes some way to the target

LOW - only small degree of contribution

Relevant target	Level of contribution	Comments
Target 1c Average annual extraction limits which are ecologically sustainable, and which minimise downstream impacts, established in all coastal catchments.	HIGH	<ul style="list-style-type: none"> This Plan clearly sets out the basis for the extraction limit for Karuah River Water Source The limit together with the proposed TDELs and IDELs should ensure adequate downstream flows Rules set out in Part 9 of this Plan
Target 1f Rules for adjustments to future water allocations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant water management committee, and acted upon.	FULL	<ul style="list-style-type: none"> Rules set out in Part 9 of this Plan
Target 2 All water management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes.	PARTIAL	<ul style="list-style-type: none"> This Plan has put in place total daily extraction limits which protect more than 70% of moderate to high flows (Part 10, Division 2) This Plan has improved very low flow protection from current while still allowing them to remain significantly impacted A class flows between 3.5 and 18 ML/day are impacted, more so than estimated current This water source has been assessed as high conservation value and therefore the relatively low level of protection / restoration of low to very low flows could be a post research issue This Plan is consistent with relevant Threatened Species Recovery Plans
Target 4a Wherever the frequency of “end of system” daily flows would be less than 60 percent of the predevelopment level without environmental flow	PARTIAL	<ul style="list-style-type: none"> Total daily extraction limits from A class protects 40% of flows which is nil improvement on estimated current B class protects 70% of flows C class protects 85% of flows

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rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent of the predevelopment frequency.		<ul style="list-style-type: none"> This Plan also maintains low extraction level for the first 24 hours of flow following a river rise Rules set out in Parts 3, 4 and 10 of this Plan
Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile.	PARTIAL	<ul style="list-style-type: none"> Cease-to-pump levels of 3.5 ML/day and 5 ML/day on a rising river is significantly less than the 95th percentile of all days with flow (9 ML/day) This Plan allows for extraction of up to 0.5 ML/day below the cease to pump for poultry and dairy sheds Historical and field information suggests that it is a losing river and therefore when flows are about 3.5 ML/day at the end of the system the flows in the mid system are up to 100% higher This Plan provides for the cease to pump to be increased to maintain 10 ML/day at Stroud Weir in June/July and October/November once Stroud Weir fishway is operational On a rising river this Plan provides for pumping to be delayed for 24 hours. This Plan provides for field assessments and a review of the CtP with adjustment up to 9 ML/day and 11 ML/day on a rising river if necessary Rules set out in Parts 3, 4 and 10 of this Plan
Target 5 Access rights for water access licensees clearly and legally specified in terms of share or extraction components.	FULL	<ul style="list-style-type: none"> This Plan clarifies the share component of the unregulated access licence and establishes total daily extraction limits for distribution to individual licensees This Plan provides principle for trading of share components and individual daily extraction limits Rules set out in Part 10 of this Plan
Target 6 The total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 200 percent of the long-term average annual extraction limit in surface	FULL	<ul style="list-style-type: none"> Total licensed share components for the Karuah River Water Source should not exceed 200% of extraction limit for this water source Rules set out in Part 9 of this Plan

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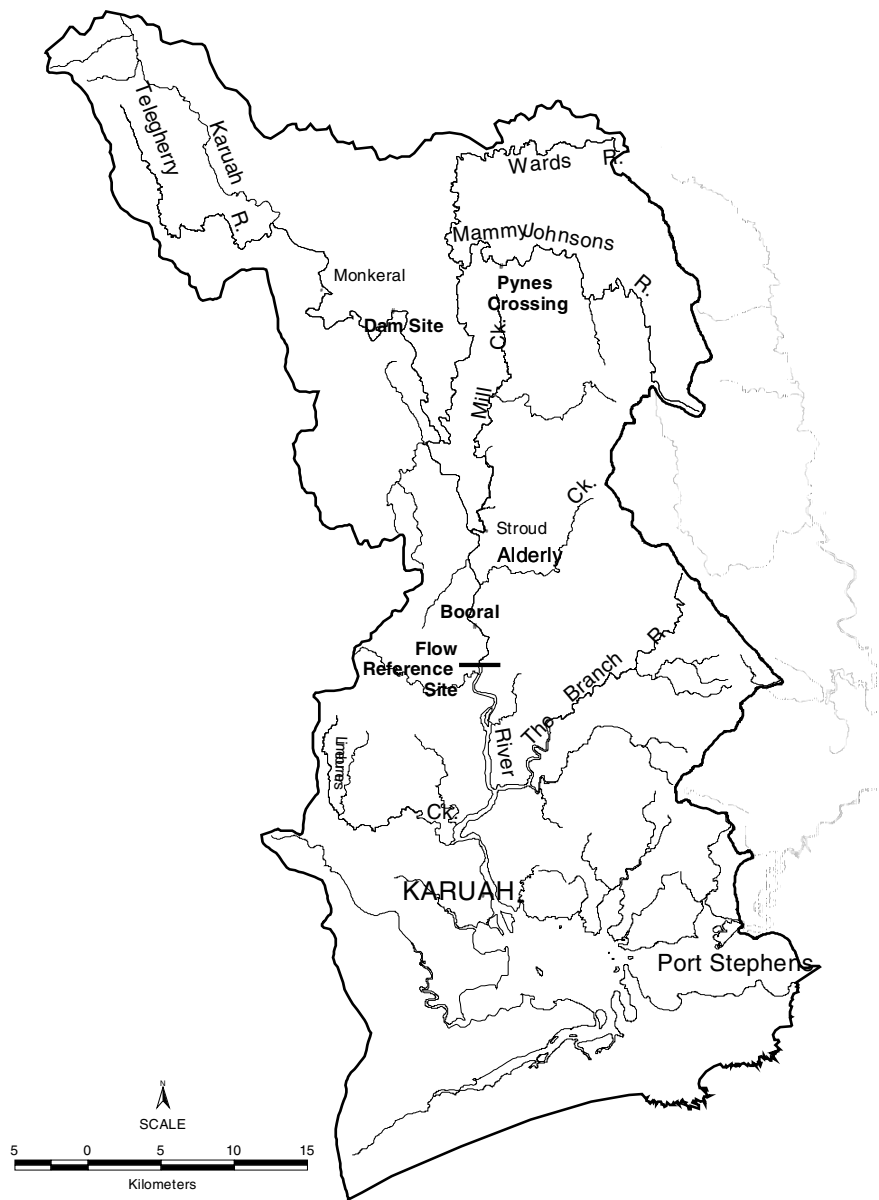
water systems.		
Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy.	PARTIAL	<ul style="list-style-type: none"> The Government has yet to establish these mechanisms and therefore these early plans cannot effectively address these targets This Plan proposes an exemption from the access licence embargo for Aboriginal cultural purposes
Target 8 Daily extraction limits specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80 percent of stressed river subcatchments.	FULL	<ul style="list-style-type: none"> This Plan establishes daily extraction limits across the water source Rules set out in Part 10 of this Plan
Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect basic domestic and stock water rights from the impact of other water extraction and use.	PARTIAL	<ul style="list-style-type: none"> Cease to pump level (3.5 – 5 ML/day) may not fully protect flows for domestic and stock requirements Rules set out in Parts 3 and 5 of this Plan
Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed.	PARTIAL	<ul style="list-style-type: none"> One Aboriginal community representatives has been involved in development of this Plan Aboriginal community forums have been held to discuss this Plan An Aboriginal respect statement has been developed by Aboriginal people consulted during the development of this Plan
Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them.	PARTIAL	<ul style="list-style-type: none"> This Plan does not address specific Aboriginal cultural or traditional requirements and has not identified any sites of particular importance This Plan does provide reasonably high level of environmental protection which should assist in protecting Aboriginal values
Target 16a All licensed share components of access licences tradeable	HIGH	<ul style="list-style-type: none"> This Plan provides for trading of share components or individual daily extraction limits This Plan does not restrict individual daily extraction limits water transfers in a downstream direction, but restricts upstream transfers so that the total limits in a management zone are below 110% of the total limits at the time of making the Plan

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		<ul style="list-style-type: none"> Rules set out in Part 11 of this Plan
Target 16c Conversion factors and protocols established to facilitate trading between water sources and/or extraction management areas, whilst also protecting existing entitlements and environmental water.	PARTIAL	<ul style="list-style-type: none"> This Plan establishes an exchange rate of 1:1 for trading within this water source but does not facilitate trade between extraction management areas
Target 16d Reduced conversion factors only applied when necessary to offset increased transmission losses associated with water supply delivery.	FULL	<ul style="list-style-type: none"> This Plan does not impose reduced conversion factors
Target 16e Any unassigned access rights identified and clear mechanisms established for their future assignment.	FULL	<ul style="list-style-type: none"> This Plan establishes rules where unassigned volumes are identified and mechanisms to distribute them nominated The presence of unassigned volumes in A and B class are of concern given that the TDELS are significantly below the full development peak daily demand The rules for unassigned water volumes future assignment are set out in this Plan Rules set out in Part 10, Division 3 of this Plan
Target 16f Water transfer zones established and limits/constraints to transfers between them made explicit in all water sources subject to a gazetted water sharing plan.	PARTIAL	<ul style="list-style-type: none"> This Plan establishes water transfer zones (schedule 4)
Target 35 All water management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current ANZECC Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries.	NIL	<ul style="list-style-type: none"> This Plan includes a generalised water quality objective This Plan does provide reasonably high level of environmental protection which should assist in protecting water quality A first-flush rule is established to protect flows for 24-hours following a river rise Rules set in Parts 4 and 10 of this Plan

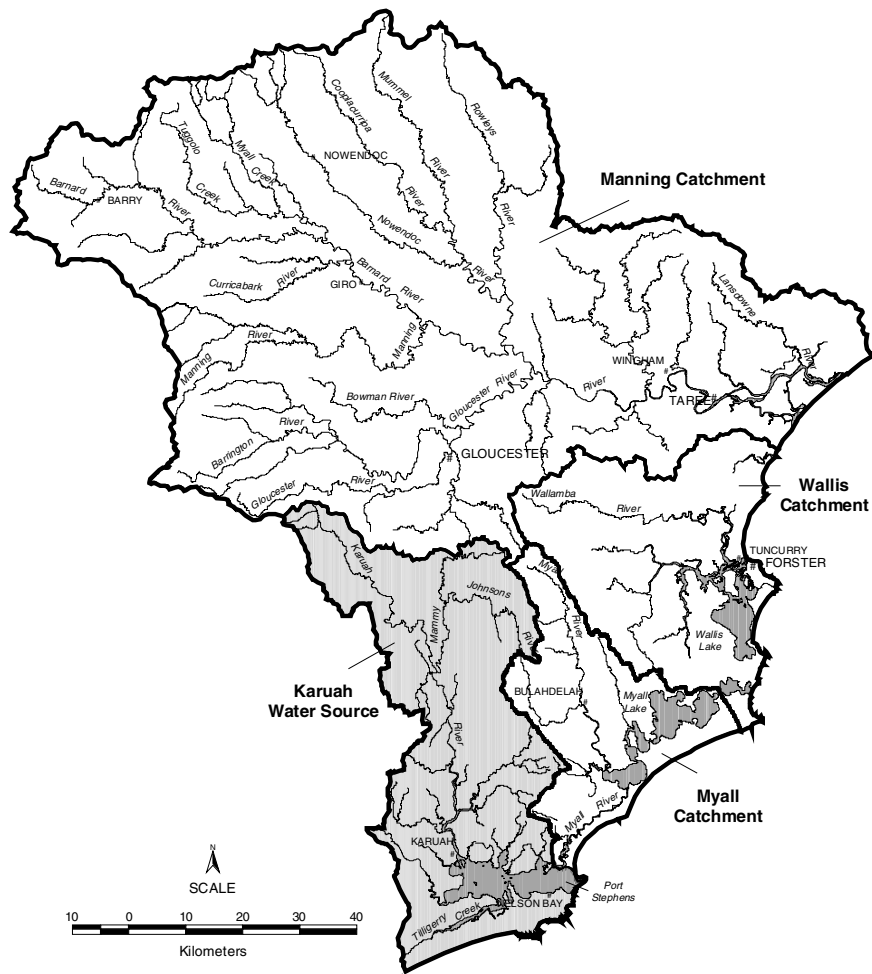
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Schedule 5 Karuah River Extraction Management Unit



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Appendix 1 Lower North Coast Water Management Area



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Appendix 2 Location of maps

The maps in relation to this Plan may be inspected at:

Regional Office
Department of Land and Water Conservation
464 King Street
NEWCASTLE NSW 2300

Taree Office
Department of Land and Water Conservation
98 Victoria Street
TAREE NSW 2430

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Appendix 3 Performance indicators

Performance indicators for the Karuah River Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
(a) Change in low flows.	11 (a) 11 (b) 11 (e) 11 (f) 11 (g) 11 (o)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. Duration and frequency of cease to pump events. Proportion of flow extracted during moderate to high flow events. 	<ul style="list-style-type: none"> River Flow Objectives (RFO) 1, 2 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every objective is relevant to every river in NSW. Plan will contribute to a decrease in the frequency and duration of low flows. This assessment will focus on the plan's end of system flow reference point, and the water pools below Stroud Weir, and will include a qualitative assessment of compliance with the water sharing rules, due to the limitations of current modelling and knowledge of past water use.
(b) Change in moderate to high flows.	11 (c) 11 (d) 11 (e) 11 (g) 11 (k) 11 (n)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. Proportion of flow extracted during moderate to high flow events. 	<ul style="list-style-type: none"> RFO 3. Plan will maintain or increase the frequency and duration of moderate to high flows. This assessment will focus on the plan's end of system flow reference point, and will include a qualitative assessment of compliance with the water sharing rules, due to the limitations of current modelling and knowledge of past water use.
(c) Change in local water utilities access (where those utilities are involved in urban water provision).	11 (i)	<ul style="list-style-type: none"> Change in safe yield (<i>safe yield</i> is the annual demand that can be supplied from the water supply headwork's and is based on the period of records used and an acceptable level of restriction). 	<ul style="list-style-type: none"> Water sharing plans for unregulated water sources have the potential to impact on urban water supplies.
(d) Change in ecological condition of this water source	11 (a) 11 (c) 11 (e) 11 (f)	<ul style="list-style-type: none"> Periodic assessment of identified indicators for ecological condition. 	<ul style="list-style-type: none"> Water sharing plans are limited to providing for changes in flow regime aimed at improving the conditions for the ecological condition of the

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Performance indicators for the Karuah River Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
and dependent ecosystems.	11 (g) 11 (l) 11 (o)	<ul style="list-style-type: none"> • Fish stocks in river and upper estuary. 	<p>river.</p> <ul style="list-style-type: none"> • There are many other factors that contribute to ecological objectives. • The focus of this performance indicator will be the effect of flow strategies. Therefore assessment of ecological condition should be based largely on hydrologic parameters (such as wetted area, depth in pools and velocity). This attempts to exclude external, non - water sharing plan related factors (such as climate and catchment landuse changes). • Although it is recognised that estuarine fish stocks are dependant on many factors, measurement of fish stock should provide indirect evidence of changed water flow characteristics.
(e)Extent to which basic landholder rights requirements have been met.	11 (h) 11 (k) 11 (i)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. • Qualitative assessment through focus group. • Water use per sector. • Consumptive use per capita/household. 	<ul style="list-style-type: none"> • Basic landholder rights usage figures in water sharing plans are estimated (not actual use).
(f) Change in economic benefits derived from water extraction and use.	11 (h) 11 (i) 11 (j) 11 (k) 11 (m) 11 (n)	<ul style="list-style-type: none"> • Number of days access provided. • Percentage change in number and volume of farm dams. • Change in unit price of water transferred. • Water extraction against flow class. • Water use per sector. • Water management costs per ML used. • Qualitative assessment through structured interviews with water user groups. 	<ul style="list-style-type: none"> • Note that there are many factors affecting economic status of a region, for example commodity prices. • Measurement of the number of farm dams will attempt to identify the impact of the plan provisions.

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Performance indicators for the Karuah River Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
(g) Extent to which native title rights requirements have been met.	11(l)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. • Monitor increase in water supply works approval applications for native title basic rights. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
(h) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	11(l)	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. • Qualitative assessment through focus group semi-structured interviews. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement. • Use of focus groups forums and semi-structured interviews has proven to be a successful mechanism in <u>engaging local Aboriginal people</u>.
(i) Contribution to the achievement of water quality to support the environmental values of this water source.	11 (o)	Change in the baseline figures of identified water quality variables.	<ul style="list-style-type: none"> • Note that many factors may effect water quality that are not related directly to flow management.

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Appendix 4 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

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groundwater source means a water source specified in a groundwater management plan.

hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or
 - (b) the total volume of water allocations in water allocation accounts, or
 - (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.

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- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
 - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or

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- (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
- (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence,

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subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.

- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

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13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.

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- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:
- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
- (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:

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- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
 - (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
 - (7) Conversion factors rules in management plans:
 - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
 - (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
 - (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
 - (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
 - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.

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- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
- (a) if either of the access licences is suspended under section 78 of the Act, or
 - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
- (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and

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- (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or

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- (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
- (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or

Water Sharing Plan for the Karuah Water Source 2003

- (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Water Sharing Plan for the Mandagery Creek Water Source 2003 Order

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Land and Water Conservation, make the following Minister's plan.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation

 Water Sharing Plan for the Mandagery Creek Water Source 2003

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Water Sharing Plan for the Mandagery Creek Water Source 2003

Water Sharing Plan for the Mandagery Creek Water Source 2003

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Mandagery Creek Water Source 2003* (hereafter *this Plan*).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* as amended (hereafter *the Act*).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

3 Date of commencement

This Plan takes effect on 1 July 2003 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Lachlan Water Management Area known as the Mandagery Creek Water Source (hereafter *this water source*) as shown on the map in Schedule 2, excluding any river that is declared by the Minister, by Order published in the NSW Government Gazette, to be a regulated river.

Note. The Lachlan Water Management Area is shown on a map in Appendix 1.

Note. Maps referred to in this Plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2.

- (2) This water source is divided into the following management zones shown on the map in Schedule 2:
 - (a) Bourimbla Creek management zone (hereafter *Zone 1*),
 - (b) Lower Boree Creek management zone [downstream of Borenore Caves] (hereafter *Zone 2*),
 - (c) Mid Mandagery Creek management zone [Manildra Creek to Boree Creek confluence] (hereafter *Zone 3*),
 - (d) Lower Mandagery Creek management zone [Boree Creek confluence to Lachlan River junction] (hereafter *Zone 4*),
 - (e) Upper Boree Creek management zone [upstream of Borenore Caves] (hereafter *Zone 5*), and
 - (f) other tributaries (hereafter *Zone 6*).

Note. 'Other tributaries' (Zone 6) is deemed to include all rivers not nominated as part of Zones 1 to 5 (shown on the map in Schedule 2).

Note. Daily extraction limits are defined for each management zone.

Water Sharing Plan for the Mandagery Creek Water Source 2003

Note. Specific conditions apply to access licences dealings between these management zones.

5 Waters to which this Plan applies

- (1) The waters of this water source include all water occurring on the land surface shown on the map in Schedule 2 including:
 - (a) all rivers in this water source including, but not limited to, those nominated in Schedule 3, and
 - (b) all lakes and wetlands in this water source.
- (2) The waters of this water source exclude all water contained within aquifers underlying this water source.
- (3) The waters of this water source exclude waters in any river that is declared by the Minister, by Order published in the NSW Government Gazette, to be a regulated river.

6 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.
- (2) Additional terms to those identified in subclause (1) are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the Water Act 1912

- (1) This Plan applies from commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note. To the extent possible, the rules embodied in this Plan will apply to matters administered under the *Water Act 1912* in the interim.

8 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act, this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government Gazette on 20 December 2002 (hereafter *the SWMOP*).
- (2) Schedule 4 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

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Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

10 Vision

The vision for this Plan is to achieve a healthy river ecosystem supporting a viable community.

11 Objectives

The objectives of this Plan are to:

- (a) identify and recognise the key ecological features dependent on flows in this water source,
- (b) protect natural water levels in pools of creeks and rivers during periods of no flow,
- (c) protect natural low flows,
- (d) protect or restore a proportion of moderate flows (freshes) and high flows,
- (e) maintain or restore the natural inundation patterns and distribution of floodwaters supporting natural wetland and floodplain ecosystems,
- (f) maintain or imitate natural flow variability of all rivers,
- (g) maintain a flow regime that supports in-river habitat, endemic aquatic species, endemic riparian vegetation and the recovery of threatened species,
- (h) deliver a range of recreational and amenity opportunities within the natural flow regime,
- (i) provide for community ownership and acceptance of this Plan,
- (j) make provision for and maintain at all times priority to access for basic landholder rights,
- (k) provide equitable access to water,
- (l) encourage water use efficient practices,
- (m) provide a platform for future sustainable economic development,
- (n) provide a water market that allows trading of water access rights within this water source,
- (o) implement water sharing that recognises, respects and protects the spiritual, economic and aesthetic values of the landscape,
- (p) recognise the contribution of this water source to the downstream water systems, and

Water Sharing Plan for the Mandagery Creek Water Source 2003

- (q) protect and improve water quality in the Mandagery Creek Water Source through the management of flows.

Note. This objective refers to maintaining water quality. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in this Plan make a positive contribution to maintaining water quality.

12 Strategies

The strategies of this Plan are to:

- (a) establish cease (and commence) to pump levels and flow classes,
- (b) limit the amount of water that can be extracted on a daily basis from different flow classes,
- (c) limit the long-term average extraction of water,
- (d) clearly defining access rules and conditions for extracting water from this water source,
- (e) establish rules for determining the water available from time to time under access licences,
- (f) establish water allocation accounting rules, and
- (g) specify access licence dealing rules that maximise flexibility for water users without adversely impacting on the ecology of this water source or existing water users.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flows,
- (b) change in moderate to high flows,
- (c) change in local water utilities access,
- (d) change in ecological condition of this water source and dependent ecosystems,
- (e) extent to which basic landholder rights requirements have been met,
- (f) change in economic benefits derived from water extraction and use,
- (g) extent to which native title rights requirements have been met,
- (h) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (i) contribution to the achievement of water quality to support the environmental values of this water source.

Note. Appendix 3 details the objectives to which these performance indicators relate and the methods for assessing these indicators.

Water Sharing Plan for the Mandagery Creek Water Source 2003

Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (c) and 21 (e) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore river flow variability in this water source.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of water in this water source within the limits of water availability on a long-term average basis, and
 - (b) sharing of the flows that occur in this water source on a daily basis.

16 Extraction management unit

- (1) The availability of water for extraction from this water source on a long-term average basis will be determined at the level of an extraction management unit.
- (2) The extraction management unit of which this water source is part is known as the Lachlan Unregulated Extraction Management Unit and is shown on the map in Schedule 5.

17 Flow classes

This Plan establishes the following flow classes as the basis for sharing of daily flows:

- (a) For Zone 1:
 - (i) very low flow class at or less than 1.48 megalitres/day (hereafter *ML/day*),
Note. 1.48 ML/day is referred to as the cease to pump level on a falling river and a commence to pump on a rising river. It corresponds to the estimated 57th percentile of all days flow .
 - (ii) A class flows greater than 1.48 ML/day and at or less than 6 ML/day,
 - (iii) B class flows greater than 6 ML/day and at or less than 50 ML/day, and
 - (iv) C class flows greater than 50 ML/day.
- (b) For Zone 2:
 - (i) very low flow class at or less than 3.9 ML/day,
Note. 3.9 ML/day is referred to as the cease to pump level on a falling river and a commence to pump on a rising river. It corresponds to the estimated 85th percentile of all days flow.
 - (ii) A class flows greater than 3.9 ML/day and at or less than 21.7 ML/day,
 - (iii) B class flows greater than 21.7 ML/day and at or less than 100 ML/day, and

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- (iv) C class flows greater than 100 ML/day.
- (c) For Zone 3:
 - (i) very low flow class at or less than 4.8 ML/day,
Note. 4.8 ML/day is referred to as the cease to pump level on a falling river and a commence to pump on a rising river. It corresponds to the estimated 53rd percentile of all days flow.
 - (ii) A class flows greater than 4.8 ML/day and at or less than 24 ML/day,
 - (iii) B class flows greater than 24 ML/day and at or less than 120 ML/day, and
 - (iv) C class flows greater than 120 ML/day.
- (d) For Zone 4:
 - (i) very low flow class at or less than 12 ML/day,
Note. 12 ML/day is referred to as the cease to pump level on a falling river and a commence to pump on a rising river. It corresponds to the estimated 73rd percentile of all days flow.
 - (ii) A class flows greater than 12 ML/day and at or less than 157 ML/day, and
 - (iii) B class flows greater than 157 ML/day and at or less than 400 ML/day, and
 - (iv) C class flows greater than 400 ML/day.
- (e) For Zone 5, very low flow class at or less than 4.1 ML/day.
Note. The 4.1 ML/day in subclause (e) is referred to as the cease to pump level on a falling river and a commence to pump on a rising river.
- (f) For Zone 6, no flow classes are established by this Plan.
Note. All water supply works located in Zone 6 are subject to the condition stated in clauses 22 and 67 which only allows water to be extracted where there is a visible flow in the river in the downstream vicinity of the water supply work.
Note. The flow classes have been determined based on flow information that inherently includes seasonal effects as well as evaporation and seepage losses.

18 Flow reference point

For the purpose of this Plan, all flows referred to relate to the estimated flows at the flow reference point at the downstream end of this water source as shown on the map in Schedule 2.

19 Determination of flow class

Announcement of daily flow classes will be made from time to time by the Minister based on the flow at flow gauging devices, correlated to the flow reference point established in clause 18.

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Part 4 Environmental water provisions

20 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

21 Environmental health water

(1) Environmental health water is identified and established as follows:

(a) In Zone 1:

(i) in very low flows, the flow occurring in this zone minus 0.5 ML/day,

Note. 0.5 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 1.

(ii) in A class flows, the flow occurring in this zone minus 2.3 ML/day,

Note. 2.3 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 1.

(iii) in B class flows, the flow occurring in this zone minus 12.5 ML/day, and

Note. 12.5 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 1.

(iv) in C class flows, the flow occurring in this zone minus 17.5 ML/day.

Note. 17.5 ML/day is the amount of water estimated at the commencement of the Plan for C class total daily extraction limit and basic landholder rights in Zone 1.

(b) In Zone 2:

(i) in very low flows, the flow occurring in this zone minus 0.88 ML/day,

Note. 0.88 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 2.

(ii) in A class flows, the flow occurring in this zone minus 11.68 ML/day,

Note. 11.68 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 2.

(iii) in B class flows, the flow occurring in this zone minus 22.88 ML/day, and

Note. 22.88 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 2.

(iv) in C class flows, the flow occurring in this zone minus 42.88 ML/day.

Note. 42.88 ML/day is the amount of water estimated at the commencement of the Plan for C class total daily extraction limit and basic landholder rights in Zone 2.

(c) In the Zone 3:

(i) in very low flows, the flow occurring in this zone minus 0.82 ML/day,

Note. 0.82 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 3.

(ii) in A class flows, the flow occurring in this zone minus 15.32 ML/day,

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Note. 15.32 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 3.

- (iii) in B class flows, the flow occurring in this zone minus 27.82 ML/day, and

Note. 27.82 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 3.

- (iv) in C class flows, the flow occurring in this zone minus 50.82 ML/day.

Note. 50.82 ML/day is the amount of water estimated at the commencement of the Plan for C class total daily extraction limit and basic landholder rights in Zone 3.

- (d) In Zone 4:

- (i) in very low flows, the flow occurring in this zone minus 1.5 ML/day,

Note. 1.5 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 4.

- (ii) in A class flows, the flow occurring in this zone minus 95.5 ML/day,

Note. 95.5 ML/day is the amount of water estimated at the commencement of the Plan for A class total daily extraction limit and basic landholder rights in Zone 4.

- (iii) in B class flows, the flow occurring in this zone minus 146.5 ML/day, and

Note. 146.5 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limit and basic landholder rights in Zone 4.

- (iv) in C class flows, the flow occurring in this zone minus 301.5 ML/day.

Note. 301.5 ML/day is the amount of water estimated at the commencement of the Plan for C class total daily extraction limit and basic landholder rights in Zone 4.

- (e) In Zone 5:

- (i) in very low flows, the flow occurring in this zone minus 0.19 ML/day, and

Note. 0.19 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 5.

- (ii) for all flows above the very low flow class, the flow occurring in this zone minus 0.19 ML/day and minus the total extraction under all access licences in this zone.

- (f) In Zone 6, the flow occurring in this zone minus 2.41 ML/day and minus the total extraction under all access licences in this zone.

Note: 2.41 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights in Zone 6.

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- (2) Environmental health water is maintained as follows:
- (a) In very low flows:
- (i) in Zones 1 to 5, the holders of access licences are not permitted any access, and
- (ii) persons exercising domestic and stock and native title rights may take a combined total of up to 0.5 ML/day in Zone 1, 0.88 ML/day in Zone 2, 0.82 ML/day in Zone 3, 1.5 ML/day in Zone 4, 0.19 ML/day in Zone 5 and 2.41 ML/day in Zone 6.
- Note.** The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment for reasons of public health, or to preserve basic landholder rights.
- (b) In A class, B class and C class flows:
- (i) in Zones 1 to 4, the holders of access licences have restricted access to water as specified in clause 45,
- (ii) persons exercising domestic and stock and native title rights may take water, and
- (iii) if the water taken under domestic and stock and native title rights is assessed to be exceeding 0.5 ML/day in Zone 1, 0.88 ML/day in Zone 2, 0.82 ML/day in Zone 3, 1.5 ML/day in Zone 4, 0.19 ML/day in Zone 5 and 2.41 ML/day in Zone 6, the access to water for access licences will be reduced in accordance with clause 50 to maintain the environmental water in this flow class.
- (c) In all flow classes, limits are imposed on the availability of water in accordance with clauses 35 and 37, that protect a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction.

Note. These rules protect the water for the environment by limiting both water extracted over the long-term and the rate of extraction of water in different flow ranges, thereby achieving the objectives of this Plan.

Note. This Plan recognises that the environmental health water provisions provide non-extractive benefits, including traditional Aboriginal spiritual, social, customary, cultural and recreational benefits, and contributes to improved water quality.

22 Extraction by water supply work

Notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only if there is visible flow in the river in the vicinity of the work.

23 Supplementary environmental water

At the commencement of this Plan, there is no water committed for specified environmental purposes in accordance with section 8 (1) (b) of the Act.

24 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The conditions of the commitment specified in subclause (1):

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- (a) are to be established by the Minister,
 - (b) are to be specified on the licence, and
 - (c) shall be such as to ensure that there is a contribution to the objectives of this Plan.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

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Part 5 Basic landholder rights

25 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

Note. The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

26 Domestic and stock rights

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock right are estimated to be a total of 6.3 ML/day and for each management zone are estimated to be a total of as follows:
 - (i) 0.5 ML/day in Zone 1,
 - (ii) 0.88 ML/day in Zone 2,
 - (iii) 0.82 ML/day in Zone 3,
 - (iv) 1.5 ML/day in Zone 4,
 - (v) 0.19 ML/day in Zone 5, and
 - (vi) 2.41 ML/day in Zone 6.
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in this water source or as a result of an increase in the exercise of basic landholder rights by existing landholders.

27 Native title rights

- (1) At the commencement of this Plan the water requirements of holders of native title rights are a total of 0 ML/day.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note: Increase in use of native title rights may occur as a result of the granting of native title rights under the Commonwealth's *Native Title Rights Act 1993*.

28 Harvestable rights

The requirement for water under harvestable rights is the amount of water owners of land are entitled to capture pursuant to the harvestable rights Order published in the NSW Government Gazette on March 2001 under section 54 of the Act.

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Part 6 Bulk access regime

29 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climatic variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 9 Division 2 of this Plan,
 - (e) establishes rules according to which access licences are managed as provided for in Part 10 of this Plan, and
 - (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Parts 9 and 10 of this Plan.

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Part 7 Requirements for water under access licences

30 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The amount of water specified in this Part represents the total volumes specified on access licences in this water source. It is not a commitment to supply that water.

31 Estimate of water requirements

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, the requirements identified for water for extraction under access licences within this water source will total approximately 8477 megalitres per year (hereafter *ML/yr*), distributed as follows:
 - (a) 124 ML/yr in Zone 1,
 - (b) 908 ML/yr in Zone 2,
 - (c) 910 ML/yr in Zone 3,
 - (d) 6001 ML/yr in Zone 4,
 - (e) 229 ML/yr in Zone 5, and
 - (f) 305 ML/yr in Zone 6.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act in the area in respect of which this Plan is made, there will be 18 runoff harvesting access licences in this water source, that will have their access licence share component expressed as the water that can be extracted from time to time from the approved works.
- (3) This Plan recognises that the total requirements for water for extraction within this water source and specific management zones may change during the term of this Plan as a result of:
 - (a) the granting, surrender, cancellation or non-renewal of access licences, or
 - (b) variations to local water utility licences arising from sections 66 (3) or 66 (4) of the Act.

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Part 8 Rules for granting access licences

32 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in this water source and the need to protect the ecological health of the river.
- (2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than access licences of the following kinds:
 - (a) local water utility access licences,
Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is a rapid growth in population.
 - (b) domestic and stock access licences,
 - (c) an access licence resulting from an application type listed in section 82 (1) of the Act, or
 - (d) unregulated river (Aboriginal cultural) access licences where the share components should not result in water allocations exceeding 10 ML/yr per application.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share and extraction components sought will be the minimum required to meet that purpose and circumstance.
- (5) Subclause (4) does not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.
- (6) Any individual daily extraction limit (hereafter *IDEL*) granted in accordance with this clause cannot exceed the *IDEL* initially assigned to an equivalent share component for that category of access licence, as varied by clause 50.
- (7) In accordance with section 56 of the Act, all access licences in this water source shall have a share component expressed as a volume in ML/yr.
- (8) Notwithstanding subclause (7) runoff harvesting access licences may have the share component expressed either as a volume in ML/yr or in terms of the amount of water that can be extracted from time to time from specified works.

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Part 9 Limits to the availability of water

Division 1 Long-term average extraction limit

33 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

34 Extraction management unit

Management of the long-term extraction of water from this water source will be undertaken in the context of the Lachlan Unregulated Extraction Management Unit (hereafter *this Unit*) referred to in clause 16.

35 Long-term average extraction limit

The long-term average extraction limit for this Unit of which this water source is a part will be the total of:

- (a) the estimated annual extraction of water averaged over the period from July 1993 to June 1999 specified on licence conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in this Unit, immediately prior to the commencement of Part 2 of Chapter 3 of the Act for this Unit, and
- (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in this Unit at the commencement of this Plan.

36 Variation of the long-term average extraction limit

The long-term average extraction limit of this Unit may be varied by the Minister if dealings under Part 11 of this Plan result in the issuing or cancellation of access licences in this Unit.

Division 2 Available water determinations

37 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
 - (a) water extraction in this Unit will be monitored in each water accounting year to determine if there is any growth in volumes extracted above the extraction limit specified in clause 35, based on comparison of the extraction limit against the average extraction within this Unit over that year and the preceding 2 years,

Note. A water accounting year is defined in clause 42 (3).

- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in a river for environmental purposes, then

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- for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work,
 - (d) for all access licences, an initial available water determination, of such volume of water as is equivalent to two times the access licence share component, should be made on 1 July 2003, and such determination should apply for one water accounting year,
 - (e) from 1 July 2004, available water determinations for local water utility and domestic and stock access licences should be of such volume of water as is equivalent to the access licence share component, with priority given to making this water available above the making of water available to all other categories of access licence, and such determinations should be made annually,
 - (f) from 1 July 2004, available water determinations for unregulated river access licences, including all subcategories, should be such volume of water as is equivalent to the access licence share component, except as provided in subclauses (g) and (h), and such determinations should be made annually,
 - (g) if the 3 year average of extraction in this Unit exceeds the long-term average extraction limit established in clause 35 by 5% or greater, then the available water determination for the following water accounting year for unregulated river access licences in this water source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
 - (h) if the 3 year average of extraction in this Unit is less than 95% of the long-term average extraction limit established in clause 35, the available water determination for unregulated river access licences in this water source shall be increased to such an extent as to allow extraction to increase to that extraction limit,
 - (i) notwithstanding subclause (h), the available water determination shall not exceed 100% of total access licence share components,
 - (j) a new available water determination for unregulated river access licences determined under subclause (g) or (h) should be repeated for each of the subsequent two water accounting years unchanged in quantity, and
 - (k) available water determinations for runoff harvesting access licences should be made annually and should be either the access licence share component or the water that can be extracted from time to time from the approved works, depending on the manner in which the share component is expressed on the licence.

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Part 10 Rules for managing access licences

Division 1 General

38 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 21 (a) and 21 (c) of the Act, having regard to:

- (a) the environmental water rules established in Part 4 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 5 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 7 of this Plan.

Division 2 Water allocation account management

39 Water allocation account management

This Division is made in accordance with sections 20 (2) (b) and 21 (c) of the Act.

40 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in this water source.

Note. Water allocations may be assigned to or from these accounts by a water allocation assignment made under section 71G of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Note. Water allocations may also be recredited to these accounts in accordance with section 76 of the Act, subject to the operation of a return flows scheme established under section 75 of the Act.

41 Accrual of water allocations

Water allocations will be accrued into water allocation accounts in accordance with the Minister's available water determinations as specified in clause 37.

42 Annual accounting for water extraction

- (1) Water taken from this water source will be accounted for at least annually.
- (2) Water extracted by a water supply work nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) The maximum water allocation that can be carried over from one water accounting year to the next is as follows:
 - (a) 100% of the access licence share component from 2003/4 to 2004/5,
 - (b) 200% of the access licence share component from 2004/5 to 2005/6, and

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- (c) thereafter, the sum of the previous two available water determinations.
- (5) Notwithstanding subclause (4) total water in any water allocation account cannot exceed 3 times the share component of the access licence:
 - (a) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in that year,
 - (b) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (c) minus any water allocations assigned to another licence by a water allocation assignment under section 71 G of the Act in that year.
- (6) In any one water accounting year, water taken from this water source under an access licence may not exceed a volume consisting of:
 - (a) twice the water allocation accrued under the licence that year,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in that year,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71 G of the Act in that year.
- (7) A water allocation account shall remain at or above zero at all times.

43 Three year accounting for water extraction

- (1) Water taken from this water source in any 3 consecutive water accounting years under an access licence may not exceed a volume consisting of:
 - (a) the water allocations accrued under the licence in those years,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71 G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71 G of the Act in those years.
- (2) Notwithstanding subclause (1), water taken under an access licence from this water source in the first 3 water accounting years of this Plan may not exceed a volume consisting of:
 - (a) 3 times the share component of the access licence,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71G of the Act in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71G of the Act in those years.

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Division 3 Sharing flows on a daily basis

44 Sharing flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act.

45 Total daily extraction limits

- (1) This Plan establishes a total daily extraction limit (hereafter *TDEL*) for each flow class as follows:

(a) Zone 1:

- (i) 1.8 ML/day for A class,
- (ii) 12 ML/day for B class, and
- (iii) 17 ML/day for C class.

Note. These flows represent 30% of the top of A class flows (which is at the 38th percentile), 38% of the top of B class flows (which is at the 16th percentile) and 16% of the C class flow measurement point (which is the 5th percentile) in Zone 1 for all days.

(b) Zone 2:

- (i) 10.8 ML/day for A class,
- (ii) 22 ML/day for B class, and
- (iii) 42 ML/day for C class.

Note. These flows represent 50% of the top of A class flows (which is at the 36th percentile) and 37% of the top of B class flows (which is at the 17th percentile) and 24% of the C class flow measurement point (which is at the 5th percentile) in Zone 2 for all days.

(c) Zone 3:

- (i) 14.5 ML/day for A class,
- (ii) 27 ML/day for B class, and
- (iii) 50 ML/day for C class.

Note. These flows represent 60% of the top of A class flows (which is at the 28th percentile) and 30% of the top of B class flows (which is at the 14th percentile) and 41% of the C class flow measurement point (which is at the 5th percentile) in Zone 3 for all days.

(d) Zone 4:

- (i) 94 ML/day for A class,
- (ii) 145 ML/day for B class, and
- (iii) 300 ML/day for C class.

Note. These flows represent 60% of the top of A class flows (which is at the 22nd percentile) and 54% of the top of B class flows (which is at the 14th percentile) and 39% of the C class flow measurement point (which is at the 5th percentile) in Zone 4 for all days.

- (e) At the commencement of this Plan, TDELs have not been established for Zone 5.

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- (f) At the commencement of this Plan, TDELs have not been established for Zone 6.

Note. All water supply works located in Zone 6 are subject to the condition stated in clause 65 (d) which only allows water to be extracted where there is a visible flow in the river in the downstream vicinity of the water supply work.

- (2) The TDEL for each flow class in each zone specified in subclause (1) applies to all rivers within that zone apart from those rivers identified as minor streams in a harvestable right order made under section 54 of the Act.

Note. The harvestable rights order applying to this area at the commencement of this Plan is that gazetted on 23 March 2001 under section 54 of the Act. It identifies minor streams as non-permanent 1st and 2nd order streams as shown on topographic maps.

46 Initial assignment of the TDEL to categories of access licence

- (1) The TDEL for each flow class of Zone 1 will initially be assigned to categories of access licences according to the following:
- (a) Domestic and stock access licences:
 - (i) 0.02 ML/day of A class,
 - (ii) 0.02 ML/day of B class, and
 - (iii) 0.02 ML/day of C class.
 - (b) Local water utility access licences:
 - (i) 0 ML/day for A class,
 - (ii) 0 ML/day for B class, and
 - (iii) 0 ML/day for C class.
 - (c) Unregulated river access licences:
 - (i) 1.78 ML/day of A class,
 - (ii) 11.98 ML/day of B class, and
 - (iii) 11.98 ML/day of C class.
- (2) The TDEL for each flow class of Zone 2 will initially be assigned to categories of access licences according to the following:
- (a) Domestic and stock access licences:
 - (i) 0.19 ML/day of A class,
 - (ii) 0.19 ML/day of B class, and
 - (iii) 0.19 ML/day of C class.
 - (b) Local water utility access licences:
 - (i) 0 ML/day for A class,
 - (ii) 0 ML/day for B class, and
 - (iii) 0 ML/day for C class.
 - (c) Unregulated river access licences:
 - (i) 10.61 ML/day of A class,
 - (ii) 21.81 ML/day of B class, and

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- (iii) 21.81 ML/day of C class.
- (3) The TDEL for each flow class of Zone 3 will initially be assigned to categories of access licences according to the following:
 - (a) Domestic and stock access licences:
 - (i) 0.05 ML/day of A class,
 - (ii) 0.05 ML/day of B class, and
 - (iii) 0.05 ML/day of C class.
 - (b) Local water utility access licences:
 - (i) 0 ML/day of A class,
 - (ii) 0 ML/day of B class, and
 - (iii) 0 ML/day of v class,
 - (c) Unregulated river access licences:
 - (i) 14.45 ML/day of A class,
 - (ii) 26.95 ML/day of B class, and
 - (iii) 26.95 ML/day of C class.
- (4) The TDEL for each flow class of Zone 4 will initially be assigned to categories of access licences according to the following:
 - (a) Domestic and stock access licences:
 - (i) 0.05 ML/day of A class,
 - (ii) 0.05 ML/day of B class, and
 - (iii) 0.05 ML/day of C class.
 - (b) Local water utility access licences:
 - (i) 0 ML/day for A class,
 - (ii) 0 ML/day for B class, and
 - (iii) 0 ML/day for C class.
 - (c) Unregulated river access licences:
 - (i) 93.95 ML/day of A class,
 - (ii) 144.95 ML/day of B class, and
 - (iii) 144.95 ML/day of C class.

Note. At the commencement of this Plan, no TDELs have been assigned for Zones 5 and 6.

47 Unassigned TDEL

At the commencement of this Plan, the unassigned TDEL in each flow class is as follows:

- (a) in Zone 1, 5 ML/day of C class,
- (b) in Zone 2, 20 ML/day of C class,
- (c) in Zone 3, 23 ML/day of C class, and
- (d) in Zone 4, 155 ML/day of C class,

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48 Daily extraction limits for individual access licence holders

- (1) Each access licence in a zone requiring an IDEL, as specified in Part 12 of this Plan, is assigned the same proportion of the TDEL for that zone as is specified in clause 46 as its share component bears to all the share components of licences of that category in that zone.
- (2) In relation to those access licences that are currently excluded from a flow class or part of a flow class by existing conditions on the licence or the water supply work approval through which the licence is being exercised at that time, the individual daily extraction limit resulting from subclause (1) will be adjusted to reflect as far as possible such an exclusion.

49 Granting of unassigned TDEL

- (1) The unassigned TDEL in clause 47 may be assigned to access licences in the following circumstances:
 - (a) where they are applied for as part of a new access licence application,
 - (b) where in accordance with clauses 54 and 55, an access licence holder applies to amend an access licence to surrender an A class IDEL in exchange for a C class IDEL,
 - (c) to a local water utility access licence where the Minister varies the licence in accordance with sections 66 (3) or 66 (4) of the Act, or
 - (d) to existing access licences for the purpose of pumping into a farm dam if:
 - (i) the purpose of the additional IDEL is sought is established by the proponent,
 - (ii) the IDEL sought is the minimum required to satisfy that purpose, and
 - (iii) the extraction is consistent with the objectives and principles of this Plan.
- (2) Where additional IDELs are assigned to an access licence in accordance with subclause (1) (a), the amount of IDEL so assigned shall be determined by the Minister consistent with the ratios of share component to IDEL for the specific category of access licence initially assigned under clause 48 and as amended by clause 50.

50 Adjustment to TDELS and IDELS

- (1) Where IDELs are assigned under clause 49 the unassigned TDEL in the specified management zone is reduced accordingly, and the TDEL assigned to the appropriate licence category in the specified management zone in clause 46 is increased accordingly.
- (2) Pursuant to section 42 (2) of the Act, if total extraction of water under domestic and stock or native title basic landholder rights in a management zone exceeds the level specified in Part 5 of this Plan:
 - (a) first the unassigned TDEL specified in clause 47 for that zone and in each flow class, then, if necessary, the TDEL for unregulated river access licences in clause 46 shall be diminished to allow these additional basic landholder rights to be met, and

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- (b) the IDELs of each unregulated river access licence in that management zone will then be reduced to comply with this diminished TDEL.
- (3) Pursuant to section 42 (2) of the Act, if any unassigned TDEL in a management zone cannot meet either:
 - (a) the IDEL requirements of applicants for new access licences for local water utility access, domestic and stock access, and unregulated river (Aboriginal cultural) access in that management zone, or
 - (b) a local water utility's IDEL requirements in that management zone resulting from a variation by the Minister under sections 66 (3) or 66 (4) of the Act, then the TDEL for unregulated river access licences in that management zone in clause 46 will be diminished to such an extent as to allow those requirements to be met.
- (4) Following a variation under subclause (3):
 - (a) the IDELs of each unregulated river access licence in that management zone will then be reduced to comply with this diminished TDEL, and
 - (b) this adjustment will be done at intervals of no greater than 5 years.
- (5) Where, in accordance with clauses 54 and 55, an access licence holder in a management zone applies to amend an access licence to surrender A class IDELs in exchange for C class IDELs:
 - (a) the unassigned TDEL in C class in that management zone nominated in clause 47 shall be reduced by the amount of C class IDEL issued,
 - (b) the A class TDEL in the management zone nominated in clause 45 shall be reduced by the amount of A class IDEL surrendered, and
 - (c) the A class TDEL for unregulated river access licences in clause 46 shall be reduced accordingly.
- (6) If water that, pursuant to an access licence:
 - (a) is committed as adaptive environmental water, then the TDEL for all classes specified on the committed access licence in the specified category in that management zone will be reduced by the IDEL on the access licence so committed and clause 45 adjusted accordingly, or
 - (b) is uncommitted to adaptive environmental water, then the TDEL for all classes specified on the committed access licence in the specified category in that management zone will be increased by the IDEL on the access licence so uncommitted and clause 45 adjusted accordingly.

51 Administrative arrangements for managing access to daily flows

- (1) Notwithstanding the forgoing provisions of this Division, this Plan allows group management of access licences with respect to the IDELs.
- (2) The Minister may determine that, from the commencement of this Plan and until otherwise determined:
 - (a) all access licences within a management zone with IDELs shall be made part of a group maintained by the Minister, and

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- (b) access licences in that management zone with IDELs will be assessed as a whole against their combined IDELs.
- (3) At any time when subclause (2) does not apply:
 - (a) access licence holders within a management zone may make a request to form a group for their access licences,
 - (b) access licence holders within a management zone may have their access licence removed from a group, in which case they shall be permitted to extract under that licence a maximum of the IDEL on the subject access licence, and
 - (c) where an access licence is removed or added to a group, the group combined IDEL shall be adjusted by the amount of IDEL on the subject access licence.
- (4) Groups will be managed according to the following rules:
 - (a) daily extraction by a group cannot exceed the combined IDEL of all access licences in the group,
 - (b) where it been assessed that a holder of a licence within a group is repeatedly causing the combined IDEL to be exceeded then the Minister may remove that access licence from the group,
 - (c) where daily extraction by a group exceeds the combined IDELs of all access licences in the group, then the Minister may dissolve the group and require each access licence holder to comply with the IDEL on the subject access licence,
 - (d) should a holder of an access licence which is part of a group commit the IDELs of that access licence to the environment consistent with section 8 (1) (c) of the Act, then those IDELs shall be removed from the group, and
 - (e) the Minister may refuse to allow an access licence to be included in a group, and may refuse a request to form a group.

Note. The Minister may allow an access licence that is linked to a water supply works approval that nominates more than one management zone to be placed in more than one approved group. The IDEL of access licences in this category may only be accessed in any one management zone on any given day.

52 Infrastructure failure

In the event of infrastructure failure, the Minister can elect to:

- (a) continue to announce the current flow class,
- (b) announce another flow class based on climatic conditions and any other flow gauging information, or
- (c) restrict access to water to the lowest flow class.

Note. Infrastructure is defined in the dictionary.

Note. The Minister may direct the holders of an access licence to cease using the water supply work in accordance with section 323 of the Act, to protect the environment.

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Part 11 Access licence dealing rules

53 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act, and with the Minister's access licence dealing principles gazetted on 20 December 2002 under section 71L of the Act.

Note. The Minister's access licence dealing principles are contained in Appendix 5.

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

Note. There are a number of mechanisms within the Act, called access licence dealings, to change either the ownership of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised. These dealings are governed by the principles in section 5 of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this plan, section 71L of the Act provides for the access licence dealing rules in this plan to prevail.

54 Rules relating to constraints within this water source

- (1) This clause applies to any relevant dealings under sections 71D, 71F and 71J of the Act, and with respect to water allocation assignments within this water source under section 71G of the Act.

- (2) Dealings are prohibited under this clause if:

- (a) any of the access licences or water allocations involved are not within this water source, unless the dealing is permitted under clause 59, or

Note. Clause 56 relates to any dealings that involve an access licence moving from one water source to another.

- (b) the dealing would result in the access licence extraction component nominating a work in a different management zone, unless provided for in subclause (3).

- (3) Subject to the review established at clause 74 of this Plan, and after year 5 of this Plan, if there is remaining unassigned C class TDEL in a management zone, an access licence holder may apply to specify additional C class IDELs in return for surrender of A class IDELs, even if the dealing results in the access licence extraction component nominating a work in a different management zone, subject to conversion factors established by the Minister in to clause 74 (1).

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55 Rules for access licence dealings which alter the times, rates or circumstances specified access licence extraction components

- (1) If there is remaining unassigned C class TDEL in a zone, a licence holder may apply under section 71F of the Act to alter their access licence extraction component in the same management zone to specify additional C class IDELS, in return for the surrender of A class IDELS.
- (2) A dealing in accordance with subclause (1):
 - (a) can only occur in management zones 1 to 4,
 - (b) can occur within the same management zone and are subject to the following conversion factors:
 - (i) in Zone 1, for every 1 ML/day of A class IDEL surrendered, 3 ML/day of C class IDEL may be issued,
 - (ii) in Zone 2, for every 1 ML/day of A class IDEL surrendered, 2 ML/day of C class IDEL may be issued,
 - (iii) in Zone 3, for every 1 ML/day of A class IDEL surrendered, 1.6 ML/day of C class IDEL may be issued, and
 - (iv) in Zone 4, for every 1 ML/day of A class IDEL surrendered, 1.6 ML/day of C class IDEL may be issued, and
 - (c) can occur between management zones 1, 2, 3 and 4 after year 5 subject to conversion factors established by the Minister.

56 Rules for change of water source

- (1) This clause relates to dealings under section 71E of the Act.

Note. Section 71E dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new licence will have to nominate specified works (by a dealing under section 71J of the Act) in the receiving water source before extraction can commence.
- (2) Dealing under section 71E of the Act are prohibited in this water source unless provided for in this clause.
- (3) An access licence with a share component specifying this water source may be cancelled and a new licence issued only if the new access licence issued is within this Unit and the access licence dealing rules in the other water source permit such a dealing.
- (4) An access licence with a share component specifying another water source may be cancelled and a new access licence issued in this water source only if the access licence dealing rules in the other water source permit such a dealing and
 - (a) the access licence cancelled is within this Unit, or
 - (b) the access licence cancelled is within the Lachlan regulated river water source.
- (5) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled access licence share component multiplied by a

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conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

- (6) The extraction component of the cancelled access licence is not to be carried over to the new access licence.

57 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category may be permitted only if:
 - (a) the conversion is from an unregulated river access licence to a runoff harvesting access licence, or
 - (b) the conversion is from a regulated river access licence to unregulated river access licence.

Note. This will occur directly following a dealing under section 71E that changes the water source to which the access licence applies.

- (3) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71L of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

58 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71H of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of this water source are prohibited.

59 Rules for water allocation assignment between water sources

- (1) This clause relates to dealings under section 71G of the Act, in relation to water allocation assignments between water sources.
- (2) Dealings under section 71G of the Act that result in water allocation assignments to or from access licences in this water source are prohibited unless provided for in this clause.
- (3) Dealings that assign water allocations between access licences inside this water source and access licences outside of this water source, but inside this extraction management unit, are permitted only if the access licence dealing rules in the other water source permit such a dealing.
- (4) Dealings which assign water allocations between access licences inside this water source, are permitted, subject to clause 54.

Note. Each water allocation assignment must be applied for. Licence holders may enter into private contracts to assign water allocations for a number of years. Such contracts are not guaranteed by the Government, and approval must be sought annually. Approval will be subject to the rules in this Plan, including local impact assessment.

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60 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71I of the Act.
- (2) Dealings that result in interstate assignment of water allocations to or from this water source are prohibited.

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Part 12 Mandatory conditions

61 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
- (2) All access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence, including IDELs arising from the operation of Part 10 Division 3 of this Plan where applicable, and the variation thereof,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to the water allocation account management rules established in Part 10 Division 2 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account,
 - (f) the requirement that water may only be taken under the access licence by the water supply work nominated by the access licence, and
 - (g) any other conditions required to implement the provisions of this Plan.

62 Unregulated river access licences

All unregulated river access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component (if specified), unless otherwise authorised by a registered group, and
- (b) notwithstanding subclause (a), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.

63 Local water utility access licences

All local water utility access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of supplying water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component,

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- (c) water may not be taken at rates greater than the maximum rates permitted by Part 10 Division 2 of this Plan, and
- (d) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.

64 Domestic and stock access licences

All domestic and stock access licences shall have mandatory conditions to give effect to the following:

- (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component (if specified),
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the individual daily extraction limit of the licence specifies that water may only be taken from a runoff harvesting dam.

65 Runoff harvesting access licences

All runoff harvesting access licences shall have a mandatory condition imposed on them stating that water may be taken without restriction in rate, but only from the specified work.

66 Unregulated river (Aboriginal cultural) access licences

All unregulated river (Aboriginal cultural) access licences shall have mandatory conditions to give effect to the following:

- (a) water shall only be taken for Aboriginal personal, domestic and communal purposes including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, hunting, fishing, gathering, and recreational, cultural and ceremonial purposes,
- (b) water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component (if specified), unless otherwise authorised by a registered group,
- (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and
- (d) the conditions in subclauses (b) and (c) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.

67 Mandatory conditions on water supply works approvals

All approvals for water supply works for this water source shall have mandatory conditions in relation to the following:

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- (a) flow measurement devices:
 - (i) shall be installed and maintained on all works used for extraction of water under an access licence, and
 - (ii) shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
- (b) water extraction and property water management infrastructure details shall be provided to the Minister on request,
- (c) it is the responsibility of the work approval holder to ascertain from the Minister the flow class at any time before commencing to take water under an access licence with an IDEL,
- (d) notwithstanding all other rights and conditions, extraction of water from a river by a water supply work which is authorised by a water management work approval is not permitted if there is no visible flow in the river below and in the vicinity of the work,
- (e) extraction under an access licence through an approved work is only authorised with respect to the work nominated by the access licence, and
- (f) approvals for in-river dams must include a condition requiring the passing of such flows as the Minister determines to be appropriate to achieve the objectives of this Plan.

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Part 13 Granting and amending water supply works approvals

68 Granting and amending water supply works approvals

This Part is made in accordance with section 21 (b) of the Act.

69 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence which is linked or proposed to be linked to the work in accordance with a condition made under clause 67 (f).
- (2) When the water allocations which may be taken from a runoff harvesting dam are reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 11 of this Plan, the Minister may impose an additional condition requiring the dam to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the dam to be reduced, consistent with the reduction in water allocations available.

Note. Extraction of water from a runoff harvesting dam requires a runoff harvesting access licence, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required. Runoff harvesting is a category of access licence to be established by regulation under section 57 (k) of the Act.

70 In-river dams

The Minister may consider applications for in-river dams within this water source.

Note. Taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act.

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Part 14 Monitoring and reporting

71 Monitoring and reporting of performance indicators

The monitoring and reporting of the performance indicators specified in clause 13 shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with a water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the implementation program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program will be included in the annual report for the Department of Land and Water Conservation.

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Part 15 Amendment of this Plan

72 Amendment of this Plan

This Part is made in accordance with section 42 (2) of the Act.

73 Amendment of very low flow provisions

- (1) The Minister may, under section 42 (2) of the Act, and by notice published in the NSW Government Gazette, vary the very low flow levels established in clause 17 and consequently the bottom of A class established in clause 17, following field verification.
- (2) Any variation made under subclause (1) should not result in the very low flow level in:
 - (a) Zone 1 being less than 1.2 or greater than 1.7 ML/day,
 - (b) Zone 2 being less than 3.5 or greater than 4.6 ML/day,
 - (c) Zone 3 being less than 4.2 or greater than 5.5 ML/day,
 - (d) Zone 4 being less than 10 or greater than 14 ML/day, and
 - (e) Zone 5 being less than 3.7 or greater than 4.8 ML/day.
- (3) The Minister should cause the field verification in subclause (1) to be undertaken as soon as practical, but before the review of this Plan under section 43 (2) of the Act.
- (4) The field verification should assess the degree to which the following objectives of the *Water Quality and River Flow Interim Environmental Objectives* (NSW Government 1999) are met:
 - (a) Objective 1 - to protect water levels in natural river pools and wetlands during periods of no flow, and
 - (b) Objective 2 - to protect natural low flows.
- (5) In undertaking the field verification the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the field results and conclusions in terms of the degree to which the objectives in subclause (4) are met,
 - (iv) the flow level recommended to meet the objectives in subclause (4), and
 - (v) the socio-economic impacts of recommended changes to the flow level.

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74 Amendment of high flow conversion factors

- (1) The Minister may, under section 42 (2) of the Act, by notice published in the NSW Government Gazette, and following field verification of high flows, if appropriate, amend clause 55 to include conversion factors associated with the surrender of A class IDELs in return for the issue of C class IDELs between management zones 1, 2, 3 and 4, to apply from years 6 to 10 of this Plan.
- (2) The Minister should cause the field verification of high flows in subclause (1) to be undertaken at the same time as the review of this Plan under section 43 (2) of the Act.
- (3) The field verification in subclause (1) should assess the degree to which Objective 3 (to protect or restore a portion of freshes and high flows) of the *Water Quality and River Flow Interim Environmental Objectives* (NSW Government 1999) is met.
- (4) In undertaking the field verification the Minister should:
 - (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the field results and conclusions in terms of the degree to which the objective in subclause (3) is met during the first years of this Plan,
 - (iii) whether or not unassigned C class TDEL in one management zone could be assigned to an access licence in another zone, following surrender of A class IDEL in that other zone,
 - (iv) the proposed conversion factors for any recommendation under subclause 4 (b) (iii), and
 - (v) an assessment of the degree to which any recommendation under subclause 4 (b) (iii) and 4 (b) (iv) will impact on the objective in subclause (3).

75 Review of field verification

- (1) The Minister should seek advice from a review body on the reports specified in clauses 73 (5) (b) or 74 (4) (b) before varying this Plan in accordance with clauses 73 (1) or 74 (1), if the reports recommend variation of the very low levels established in clause 17, or the conversion factors established in clause 55.
- (2) This review body may be:
 - (a) a water management committee with water sharing responsibilities for this water source if one exists,
 - (b) an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a water management committee referenced at subclause (a), or
 - (c) if there is no water management committee with water sharing responsibilities for this water source, then by a catchment management board with responsibilities for this water source or an expert advisory panel

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or advisory committee established for this purpose by the Minister on the recommendation of a catchment management board.

- (3) The review body should provide advice to the Minister on the reports, and advise on any changes to the recommendations contained in the reports in relation to any variation of the very low flow levels, or conversion factors.
- (4) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date at the latest.

76 Other amendment of this Plan

This Plan can be amended in accordance with clause 50 in respect adjustments to TDELs and IDELs.

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

account water is the balance in an access licence water allocation account at a particular time.

Note. An access licence water allocation account records water allocations accrued under the licence as well as water allocations taken, assigned or re-credited. The operation of the account is also governed by rules for the carrying over of credits from one accounting period to the next and rules for the maximum credit that may be allowed to accumulate in the account as established in a water sharing plan. Water allocations are the shares of available water accrued under an access licence from time to time as a result of available water determinations.

Cap is the long-term average volume of water that would have been diverted under the development and management conditions defined in Schedule F of the Murray Darling Basin Agreement.

conversion factor refers to the adjustment factor that is to be applied to share components when they are cancelled or reissued in a different water source and visa versa, or when the licence category is changed. It is designed to provide for the fact that the value of a unit of share component in terms of the average water allocations that result from it may vary from one water source to another, or from one category of licence to another.

endangered ecological communities means ecological communities listed in Schedule 1 of the *Threatened Species Conservation Act 1995* or Schedule 4 of the *Fisheries Management Act 1994*.

extraction limit is a limit on the amount of water that may be extracted from an extraction management unit.

extraction management unit is a group of water sources for the purpose of managing annual average extraction.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs. See also **in-river dam** and **runoff harvesting dam**.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) very low flows may be a class on their own,
- (b) low flows may be categorised as 'A' class,
- (c) moderate flows may be categorised as 'B' class,
- (d) high flows may be categorised as 'C' class,
- (e) very high flows may be categorised as 'D' class, and
- (f) extremely high flows may be categorised as 'E' class.

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

individual daily extraction limit (IDEL) is the volume of water that may be extracted by an individual access licence from an unregulated river on a daily basis from a particular flow class.

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infrastructure includes, but is not limited to, a:

- (a) flow gauging device or any other appliance that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated, or
- (b) flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within this water source.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher order rivers are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a “river” gazetted 23rd March 2001. See also *farm dam* and *runoff harvesting dam*.

management zone is an area within the water source to which total daily extraction limits are defined. Management zones are designated only where the water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area.

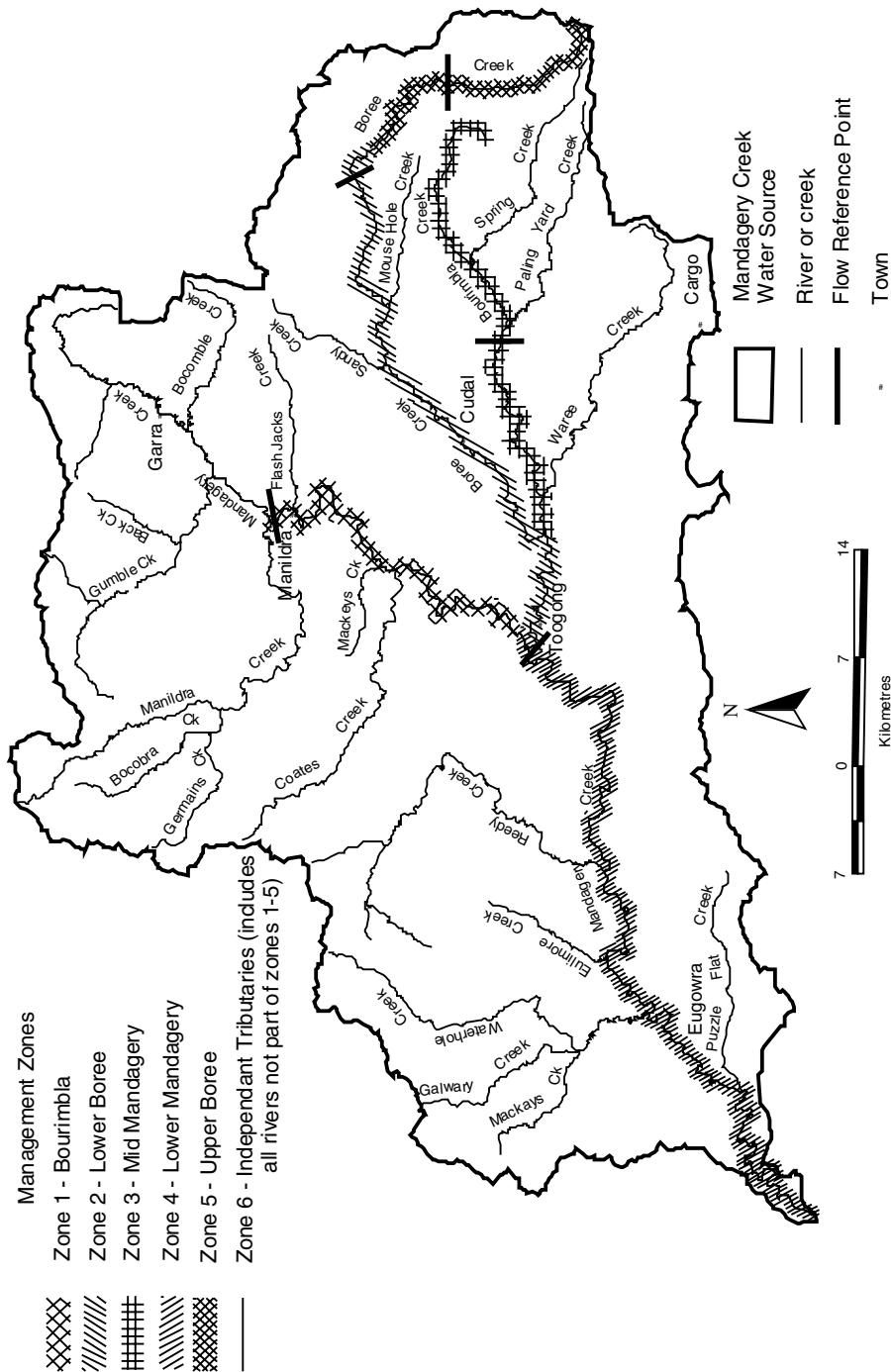
runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the order made under section 5 of the *Water Act 1912* in relation to the definition of a river gazetted 23rd March 2001. See also *farm dam* and *in-river dam*.

Note. This order refers to watercourses shown as blue lines on topographic maps. The lines which are uppermost in a catchment are 1st order streams, when two 1st order streams are joined they make a 2nd order stream, etc. For more information see the Farm Dams Assessment Guide available from the Department of Land and Water Conservation.

total daily extraction limit (TDEL) is the volume of water that may be extracted under access licences from an unregulated river on a daily basis from a particular flow class.

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Schedule 2 Mandagery Creek Water Source



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Schedule 3 Rivers in the Mandagery Creek Water Source

This water source excludes any river that is declared by the Minister, by Order published in the NSW Government Gazette, to be a regulated river.

This water source includes, but is not limited to:

Back Creek,	Black Flat Creek
Bocobra Creek	Bocomble Creek
Boree Creek	Bourimbla Creek
Cheeseman Creek	Coates Creek
Dirt Hole Creek	Eulimore Creek
Fern Creek	Galwary Creek
Flash Jacks Creek	Greentrees Creek
Gillgilbury Creek	Jacks Creek
Gumble Creek	Mackays Creek
Killanbutta Creek	Mandagery Creek
Mackeys Creek	Mousehole Creek
Manildra Creek	Puzzle Flat Creek
Paling Yard Creek	Sandy Creek
Reedy Creek	St Germaines Creek
Spring Creek	Terrarra Creek
Warree Creek	Walkers Creek
Wattle Creek	Waterhole Creek

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Schedule 4 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL – contributes to target in full

HIGH - while not fully contributing to target, there is a good level of contribution

PARTIAL - goes some way to contributing to the target

LOW - only small degree of contribution to the target

Relevant Target	Level of Contribution	Comments
Target 1b Extractions in Murray-Darling Basin's unregulated rivers limited to the MDBMC Cap level	FULL	<ul style="list-style-type: none"> Clause 35 (a) provides for the long-term average extraction limit for this water source.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon	FULL	<ul style="list-style-type: none"> Clause 37 provides for the Minister making available water determinations where the long-term average extraction limit is exceeded.
Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes	PARTIAL	<ul style="list-style-type: none"> This Plan has put in place TDELS in Zones 1 – 4 protecting from 40 – 70% of A class flows and 46 – 62% of B class flows and 59% to 84% of C class flows. TDELS have not been established for Zones 5 and 6. At least 2 listed threatened fish species are likely to occur in Mandagery (silver perch, Macquarie perch) but no recovery plans are in place. Therefore there are no specific provisions in this Plan. This Plan provides for prohibition of trading of IDELS between zones and into all zones.
Target 4a Wherever the frequency of "end of system" daily flows would be less than 60 percent of the predevelopment level without environmental water rules or extraction limits, the flows increased to 60 percent of predevelopment levels or increased by at least 10 percent	PARTIAL	<ul style="list-style-type: none"> Zone 1: 70% of A class protected, 62% of B class protected, 84% of C class protected. Zone 2: 50% of A class protected, 63% of B class protected 74% of C class protected. Zone 3: 40% of A class protected, 70% protected 59% of C class protected.

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of the predevelopment frequency		<ul style="list-style-type: none"> • Zone 4: 40% of A class protected, 56% of B class protected 61% of C class protected. • Zone 5: cease to pump provisions only. • Zone 6: visible flow cease to pump provisions only. • Provision is required for protecting high flows of all zones.
Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile	PARTIAL	<ul style="list-style-type: none"> • Very low flows (all days), 57th percentile Zone 1, 85th percentile Zone 2, 53rd percentile Zone 3, 73rd percentile Zone 4 are protected from licensed extraction. • Very low flows need defining for Zones 6 to provide for the protection of environmental health water. • Current CtP for Zones 5 & 6 may not provide for the protection of environmental health water. This Plan provides for a review and amendment of the CtP. • This Plan provides for field verification and adjustment of CtP for each Management Zone.
Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components	FULL	<ul style="list-style-type: none"> • This Plan recognises share components and establishes total daily extraction limits for distribution to individual licences • It also enables trading of share components, allocations and individual daily extraction limits.
Target 6b A pathway for reducing the share components to 200 percent of the long term average annual extraction limit to be established not later than the end of the term of the SWMOP	FULL	<ul style="list-style-type: none"> • Total Lachlan unregulated river entitlements should not exceed 200% of extraction limit for the Lachlan Unregulated Extraction Management Unit.
Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy	HIGH	<ul style="list-style-type: none"> • The Government has established other mechanisms to address this target. • This Plan provides for issuing of unregulated river access licences for Aboriginal cultural purposes and for adjusting the assigned TDEL to provide an IDEL where such licences are issued.

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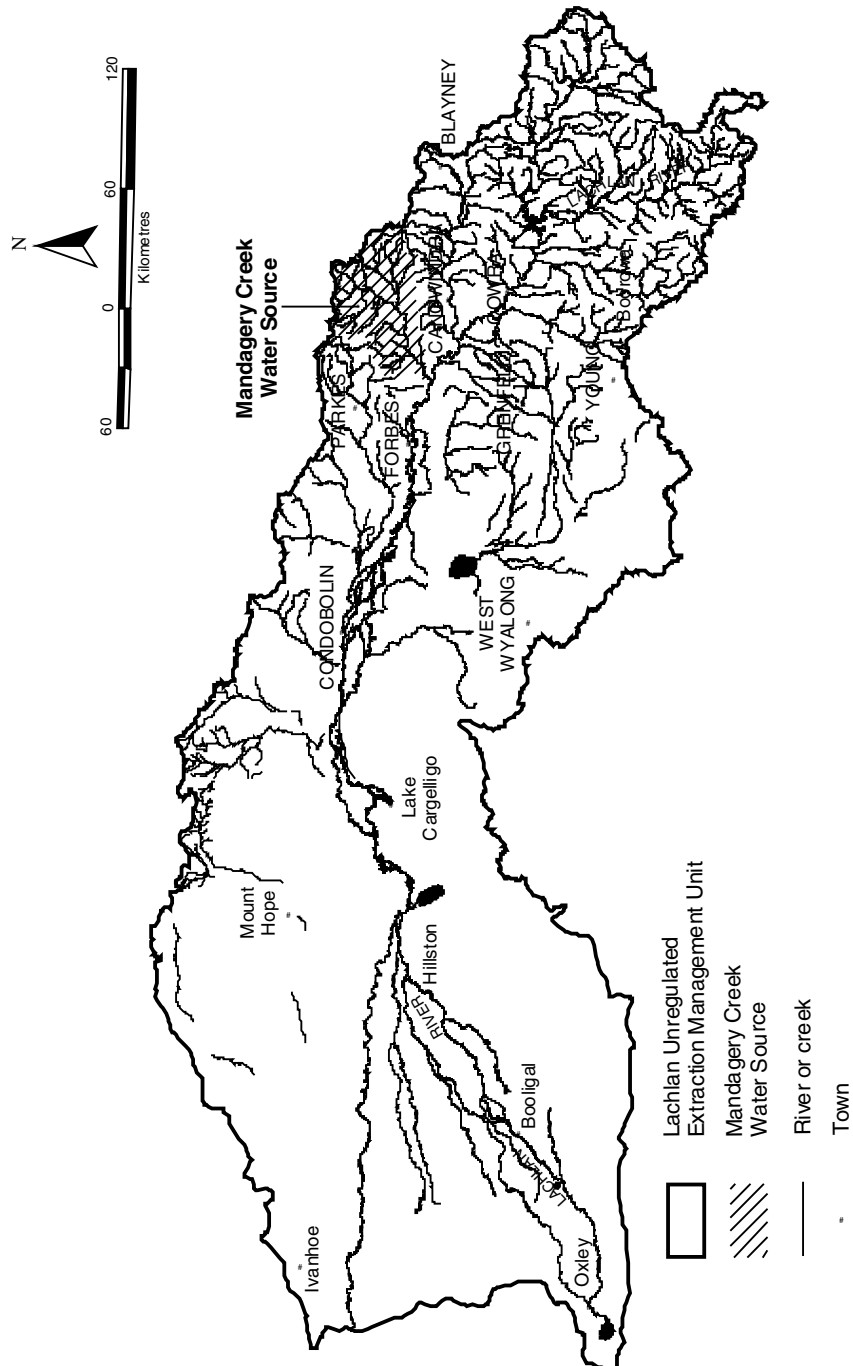
		<ul style="list-style-type: none"> This Plan provides water market opportunities within this water source.
<p>Target 8 Daily extraction components specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80 percent of stressed unregulated rivers</p>	FULL	<ul style="list-style-type: none"> This Plan establishes bulk daily extraction across most of the water source, except zones 5 and 6.
<p>Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use</p>	PARTIAL	<ul style="list-style-type: none"> Domestic and stock basic rights are estimated at 6.3 ML/day. Estimates have been provided for each Management Zone. Very low flows meet environment and basic right requirements in Zones 1, 2, 4 and 5 yet would need to be increased in Zone 6 to meet these requirements. A high percentage of flows are protected in A class in Zones 1, 2, 3, & 4 to meet basic rights and environment needs. The zero visible flow CtP mandatory condition for zone 6 may not provide for basic landholder rights. This Plan provides for a review of the CtP at year 5.
<p>Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed</p>	PARTIAL	<ul style="list-style-type: none"> DLWC consulted with the local Aboriginal community about this Plan. This Plan provides for issuing of unregulated river access licences for Aboriginal cultural purposes and for adjusting the assigned TDEL to provide an IDEL where such licences are issued.
<p>Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them</p>	PARTIAL	<ul style="list-style-type: none"> Aboriginal cultural or traditional values or requirements have not been identified. This Plan does provide a level of environmental protection, which should assist in protecting Aboriginal, values however the further erosion of moderate to high flows on areas of Aboriginal value is not known.

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Target 16a All share components of access licences tradeable	FULL	<ul style="list-style-type: none"> This Plan provides for trading of annual and daily rights (Part 11).
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water	FULL	<ul style="list-style-type: none"> This Plan provides for the rates to be determined by the Minister.
Target 16d Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery	FULL	<ul style="list-style-type: none"> This Plan does not impose reduction factors.
Target 16e Any unassigned access rights identified and clear mechanisms established for their future assignment	FULL	<ul style="list-style-type: none"> This Plan provides for assigning of unassigned TDEs.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	FULL	<ul style="list-style-type: none"> Management zones have been established as water trading zones and trading of daily rights between Zones are generally prohibited.
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries	PARTIAL	<ul style="list-style-type: none"> This Plan includes a water quality objective.

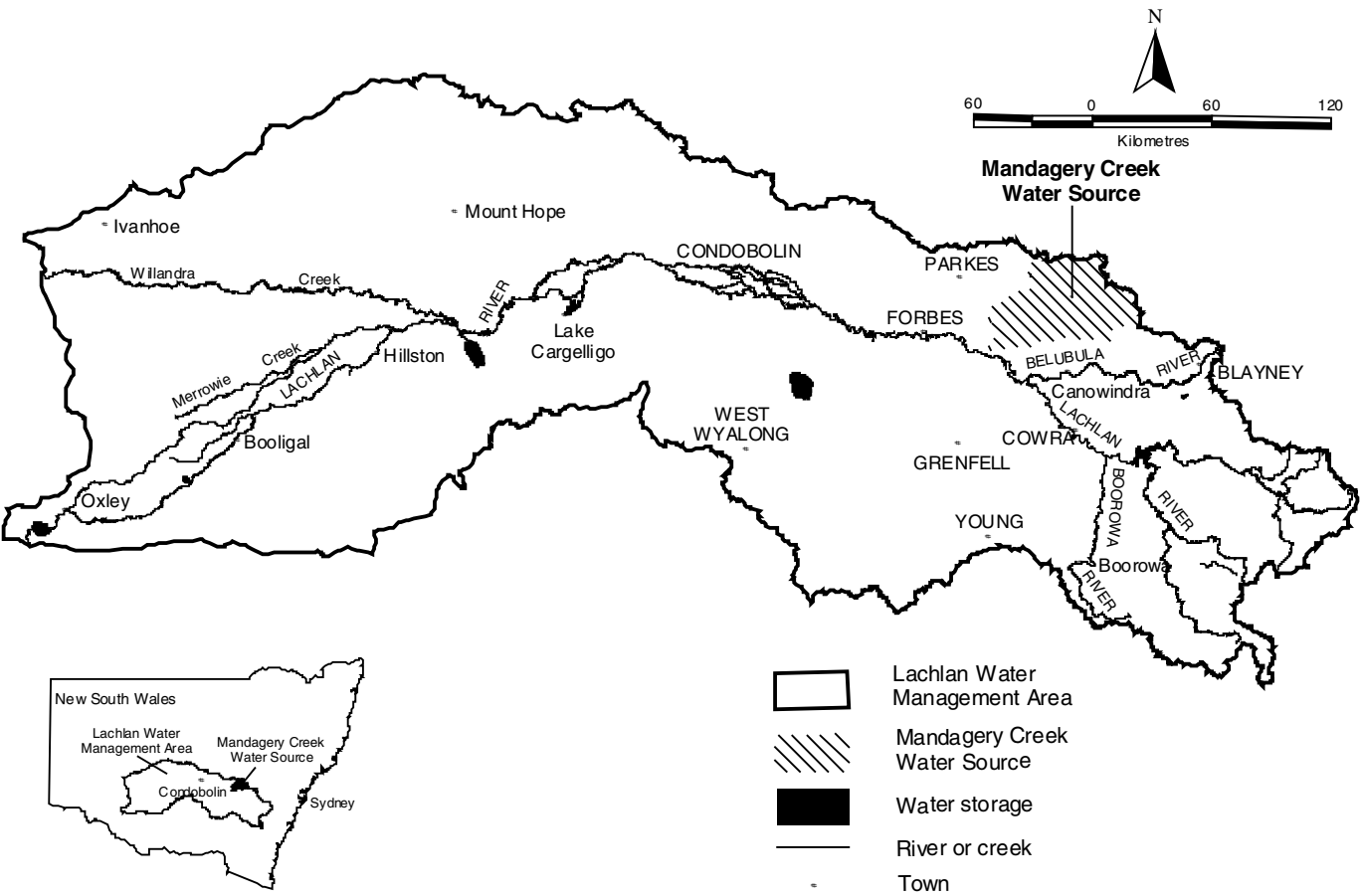
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Schedule 5 Lachlan Unregulated Extraction Management Unit



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Appendix 1 Lachlan Water Management Area



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Appendix 2 Location of maps

The maps in relation to this Plan may be inspected at:

District Office
Department of Land and Water Conservation
30 Lynch Street
COWRA NSW 2794

District Office
Department of Land and Water Conservation
9 Spring Street
FORBES NSW 2871

Regional Office
Department of Land and Water Conservation
Cnr Anson & Kite Streets
ORANGE NSW 2800

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Appendix 3 Performance indicators

Performance indicators for the Mandagery Creek Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
(a) Change in low flows.	11 (a) 11 (b) 11 (c) 11 (e) 11 (f) 11 (g) 11 (p)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> River Flow Objectives (RFOs) 1, 2 and 6. RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. Note. Not every objective is relevant to every river in NSW. Plan will contribute to a decrease in the frequency and duration of low flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(b) Change in moderate to high flows.	11 (a) 11 (d) 11 (e) 11 (f) 11 (g) 11 (h) 11 (p)	<ul style="list-style-type: none"> Assessment of change in flow duration characteristics at identified reference points. 	<ul style="list-style-type: none"> RFO 3. Plan will maintain or increase the frequency and duration of moderate to high flows. This assessment will focus on the plan's end of system reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.
(c) Change in local water utilities access	11 (k) 11 (m)	<ul style="list-style-type: none"> Change in safe yield (safe yield is the annual demand that can be supplied from the water supply headworks and is based on the period of records used and an acceptable level of restriction). 	<ul style="list-style-type: none"> Water sharing plans for unregulated water sources have the potential to impact on urban water supplies.
(d) Change in ecological	11 (a) 11 (b)	<ul style="list-style-type: none"> Periodic assessment of 	<ul style="list-style-type: none"> Water sharing plans are limited to providing for changes in flow regime

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Performance indicators for the Mandagery Creek Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
condition of this water source and dependent ecosystems.	11 (c) 11 (d) 11 (e) 11 (f) 11 (g) 11 (h) 11 (p)	identified indicators for ecological condition. <ul style="list-style-type: none"> • Key ecological characteristics of flow dependent features identified within this water source. 	aimed at improving the conditions for the ecological condition of the river. <ul style="list-style-type: none"> • There are many other factors that contribute to ecological objectives. • The focus of this performance indicator will be the effect of flow strategies. Therefore assessment of ecological condition should be based largely on hydrologic parameters (such as wetted area, depth in pools and velocity). This attempts to exclude external, non - water sharing plan related factors (such as climate and catchment landuse changes).
(e)Extent to which basic landholder rights requirements have been met.	11 (j)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. 	<ul style="list-style-type: none"> • Basic landholder rights usage figures in water sharing plans are estimated (not actual use).
(f) Change in economic benefits derived from water extraction and use.	11 (h) 11 (k) 11 (m) 11 (n)	<ul style="list-style-type: none"> • Number of days access provided. • Percentage change in number and volume of farm dams. • Change in unit price of water transferred. 	<ul style="list-style-type: none"> • There are many factors affecting economic status of a region, for example commodity prices. • Extent to which extraction rights have been realised. • Measurement of the number of farm dams will attempt to identify the impact of the plan provisions.
(g) Extent to which native title rights requirements have been met.	11 (j) 11 (o)	<ul style="list-style-type: none"> • Assessment of cease to pump levels in relation to basic rights requirements. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
(h)Extent of recognition of spiritual, social and customary	11 (o) 11 (k) 11 (i)	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of

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Performance indicators for the Mandagery Creek Water Sharing Plan			
Performance indicator	Related objective	As measured by	Commentary
values of water to Aboriginal people.		of values of water to Aboriginal people.	five years there should be relevant information collected for each water source, as a minimum requirement.
(i) Contribution to the achievement of water quality to support the environmental values of this water source.	11(q)	<ul style="list-style-type: none"> Change in the baseline figures of identified water quality variables. 	<ul style="list-style-type: none"> Many factors may affect water quality that are not related directly to flow management.

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Appendix 4 Minister's access licence dealing principles

Access Licence Dealing Principles Order 2002

Part 1 Introduction

1. Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

2. Commencement

This Order commences on 20 December 2002.

3. Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

4. Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

5. Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
 - (a) the water management principles, and
 - (b) the principles in this order, and
 - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

6. Definitions

In this order the following definitions apply:

dealing means a dealing under Chapter 3, Part 2 Division 4 of the *Water Management Act 2000*.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

groundwater source means a water source specified in a groundwater management plan.

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hydrologically connected water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

management plan means a plan made under section 41 or 50 of the *Water Management Act 2000*.

regulated river water source means a water source specified in a regulated river management plan.

runoff harvesting dam is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the *Water Management Act 2000*.

unregulated river water source means a water source specified in an unregulated river management plan.

Part 2 General principles

7. Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
 - (a) the total volume of share components, or
 - (b) the total volume of water allocations in water allocation accounts, or
 - (c) where relevant, the sum of limits on rates of extraction in extraction components.

8. Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.

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- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

9. Impacts on water users

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

10. Maximising social and economic benefits

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
 - (a) allowing water to move from lower to higher value uses, and
 - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
 - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

Part 3 Principles for specific types of access licence dealings

11. Transfer of access licences

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

Note. as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

12. Conversion of access licence to new category

- (1) This clause applies to access licence dealings under section 71B of the Act.
- (2) Dealings under section 71B are prohibited:
 - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
 - (b) if there is an outstanding debt under the Act in respect of the licence, or

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- (c) if the licence is suspended under section 78 of the Act, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
- (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
 - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence,

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subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.

- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
 - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
 - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
 - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
 - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

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13. Subdivision of access licences

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

Note. As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

14. Consolidation of access licences

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if the licences to be consolidated do not have share components in the same water source, or
 - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.

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- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

Note. as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

15. Assignment of rights under access licences

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.
- (2) Dealings under section 71D are prohibited:
- (a) if there is an outstanding debt under the Act in respect of any of the licences, or
 - (b) if any of the licences are suspended under section 78 of the Act, or
 - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

16. Change of water source

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
- (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence does not have the share component expressed as a volume, or
 - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (e) from an unregulated river water source to a regulated river water source, or
 - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
 - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:

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- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
 - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
- (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
- (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

17. Amendment of extraction component of access licence

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
- (a) if there is an outstanding debt under the Act in respect of the licence,
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
- (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
 - (b) those rules specifically indicate the nature of those amendments which are allowed.

Water Sharing Plan for the Mandagery Creek Water Source 2003

- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Note. As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

18. Assignment of water allocations between access licences

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
- (a) if either of the access licences is suspended under section 78 of the Act, or
 - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
 - (d) if any of the access licences is of category runoff harvesting, or
 - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
 - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
- (a) either licence is of category supplementary, or
 - (b) there is no hydrologic connection between the water sources, or
 - (c) one water source is a regulated river and the other is an unregulated river, or
 - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and

Water Sharing Plan for the Mandagery Creek Water Source 2003

- (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

19. Interstate transfer dealings

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
 - (a) if there is an outstanding debt under the Act in respect of the licence, or
 - (b) if the licence is suspended under section 78 of the Act, or
 - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
 - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
 - (a) protect environmental water from being affected by such dealings, and
 - (b) protect basic landholder rights from being affected by such dealings, and
 - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

20. Interstate assignment of water allocations

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
 - (a) if the access licence is suspended under section 78 of the Act, or

Water Sharing Plan for the Mandagery Creek Water Source 2003

- (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
 - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
 - (d) if the access licence is of category runoff harvesting or supplementary water, or
 - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
- (a) protect environmental water from being affected by the dealing, and
 - (b) protect basic landholder rights from being affected by the dealing, and
 - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
 - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
 - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

21. Nomination of water supply works

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
 - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or

Water Sharing Plan for the Mandagery Creek Water Source 2003

- (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
 - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
 - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
 - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
 - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

Department of Mineral Resources

NOTICE is given that the following applications have been received:

EXPLORATION LICENCE APPLICATIONS

(T03-0006)

No. 2052, ISOKIND PTY LIMITED (ACN 081 732 498), area of 93 units, for Group 1, dated 10 February 2003. (Cobar Mining Division).

(T03-0007)

No. 2053, ISOKIND PTY LIMITED (ACN 081 732 498), area of 66 units, for Group 1, dated 10 February 2003. (Cobar Mining Division).

(T03-0008)

No. 2055, LFB RESOURCES NL (ACN 073 478 574), area of 15 units, for Group 1, dated 14 February 2003. (Orange Mining Division).

EDWARD OBEID, M.L.C.,
Minister for Mineral Resources

NOTICE is given that the following applications have been granted:

EXPLORATION LICENCE APPLICATIONS

(T02-0420)

No. 1991, now Exploration Licence No. 6048, SIPA EXPLORATION NL (ACN 056 446 890), County of Yancowinna, Map Sheet (7133, 7233), area of 8 units, for Group 1, dated 10 February 2003, for a term until 9 February 2005.

(T02-0421)

No. 1992, now Exploration Licence No. 6049, SIPA EXPLORATION NL (ACN 056 446 890), County of Yancowinna, Map Sheet (7234), area of 25 units, for Group 1, dated 10 February 2003, for a term until 9 February 2005.

(T02-0425)

No. 1996, now Exploration Licence No. 6050, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827), County of Yancowinna, Map Sheet (7134), area of 10 units, for Group 1, dated 10 February 2003, for a term until 9 February 2005.

EDWARD OBEID, M.L.C.,
Minister for Mineral Resources

NOTICE is given that the following applications for renewal have been received:

(T91-0698)

Exploration Licence No. 4232, AUSMINDEX NL (ACN 003 287 634) and ALLEGIANCE MINING OPERATIONS PTY LTD (ACN 066 454 457), area of 5 units. Application for renewal received 14 February 2003.

(T92-0381)

Exploration Licence No. 4458, AUSMINDEX NL (ACN 003 287 634) and ALLEGIANCE MINING OPERATIONS PTY LTD (ACN 066 454 457), area of 4 units. Application for renewal received 14 February 2003.

(T01-0331)

Exploration Licence No. 4811, GATEWAY MINING NL (ACN 008 402 391), area of 16 units. Application for renewal received 11 February 2003.

(T98-1203)

Exploration Licence No. 5569, AUSTRALIAN GEOSCIENTISTS PTY LTD (ACN 010 860 625), area of 4 units. Application for renewal received 11 February 2003.

(T02-0822)

Mining Purposes Lease No. 322 (Act 1973), GRAHAM LESLIE WHITLOW, IAN JOHN WOODCOCK, LEONARD KEITH HOBDEN and WILLIAM BEAD O'BRIEN, area of 3 hectares. Application for renewal received 14 February 2003.

EDWARD OBEID, M.L.C.,
Minister for Mineral Resources

RENEWAL OF CERTAIN AUTHORITIES

NOTICE is given that the following authorities have been renewed:

(T86-0932)

Exploration Licence No. 2934, TELMINEX NL (ACN 003 309 911), County of Georgiana, Map Sheet (8729), area of 12 units, for a further term until 22 October 2004. Renewal effective on and from 31 January 2003.

(T96-1070)

Exploration Licence No. 5130, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827), County of Blaxland, Map Sheet (8032), area of 114 units, for a further term until 8 October 2004. Renewal effective on and from 6 February 2003.

(T96-1044)

Exploration Licence No. 5158, OPAL VENTURES PTY LIMITED (ACN 073 082 416), County of Finch, Map Sheet (8639), area of 4 units, for a further term until 20 November 2004. Renewal effective on and from 6 February 2003.

(T98-1108)

Exploration Licence No. 5526, AUSTMINEX NL (ACN 005 470 799), County of Blaxland, Map Sheet (8132), area of 18 units, for a further term until 5 October 2004. Renewal effective on and from 6 February 2003.

(T98-1007)

Exploration Licence No. 5544, ILUKA RESOURCES LIMITED (ACN 008 675 018), County of Wentworth, Map Sheet (7329, 7330), area of 152 units, for a further term until 29 November 2004. Renewal effective on and from 11 February 2003.

(C98-0162)

Exploration Licence No. 5564, HUNTER VALLEY COAL PROCESSING PTY LTD (ACN 069 244 953), County of Northumberland, Map Sheet (9131, 9132, 9232), area of 6200 hectares, for a further term until 18 March 2005. Renewal effective on and from 6 February 2003.

(T00-0028)

Exploration Licence No. 5766, AUSTRALIAN GEOSCIENTISTS PTY LTD (ACN 010 860 625), County of Blaxland, Map Sheet (8032), area of 23 units, for a further term until 21 August 2004. Renewal effective on and from 6 February 2003.

(T00-0064)

Exploration Licence No. 5769, PASMINGO AUSTRALIA LIMITED (ACN 004 074 962), County of Mouramba, Map Sheet (8133), area of 19 units, for a further term until 28 August 2004. Renewal effective on and from 6 February 2003.

(C00-1105)

Coal Lease No. 219 (Act 1973), MOUNT THORLEY OPERATIONS PTY LIMITED (ACN 000 013 249), Parish of Whybrow, County of Hunter; Parish of Vere, County of Northumberland; Parish of Warkworth, County of Northumberland; Parish of Whittingham, County of Northumberland; and Parish of Wollombi, County of Northumberland, Map Sheet (9132-4-S), area of 1992 hectares, for a further term until 23 September 2023. Renewal effective on and from 17 December 2002.

EDWARD OBEID, M.L.C.,
Minister for Mineral Resources

**CANCELLATION OF AUTHORITIES AT REQUEST OF
HOLDERS**

NOTICE is given that the following authorities have been cancelled:

(T98-1224)

Exploration Licence No. 5576, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827), County of Cunningham and County of Kennedy, Map Sheet (8332), area of 16 units. Cancellation took effect on 13 February 2003.

(T00-0163)

Exploration Licence No. 5867, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827), County of Georgiana, Map Sheet (8729), area of 16 units. Cancellation took effect on 7 February 2003.

EDWARD OBEID, M.L.C.,
Minister for Mineral Resources

PETROLEUM (ONSHORE) ACT 1991

Notice of Moratorium
Darling Basin

AS part of the Exploration NSW initiatives for the petroleum 2003 - 2004 program, I, EDWARD OBEID, Minister for Mineral Resources, pursuant to section 9 (1) of the Petroleum (Onshore) Act 1991, hereby designate that petroleum titles will not be granted in respect of the lands defined by the sixty one (61) graticular blocks set out in the Schedule hereto.

The moratorium on the lodgement of applications for petroleum titles will allow the Department of Mineral Resources to undertake a seismic survey (five seismic lines) to extend its knowledge of the Darling Basin structures. The results will be embodied in a package covering the Darling Basin to be released to the petroleum exploration industry in the first half of 2004.

The moratorium, operative from the date of Gazettal, shall remain in force until 30 June 2004, from which date competitive applications will be received up to and including 30 September 2004 - (C94/0361).

SCHEDULE

Bourke 1:1,000,000 Sheet

Blocks
3027–3033
3099–3105
3171–3177
3243–3249
3316–3321

Adelaide 1:1,000,000 Sheet

Blocks
285–288
357–360
423–432
495–497
567–569
639–641

Dated: 7th February 2003.

EDWARD OBEID, M.L.C.,
Minister for Mineral Resources

Department of Planning



New South Wales

Grafton Local Environmental Plan 1988 (Amendment No 28)

under the

Environmental Planning and Assessment Act 1979

I, the Minister for Planning, make the following local environmental plan under the *Environmental Planning and Assessment Act 1979*. (G00/00199/S69)

ANDREW REFSHAUGE, M.P.,
Minister for Planning

Clause 1 Grafton Local Environmental Plan 1988 (Amendment No 28)

Grafton Local Environmental Plan 1988 (Amendment No 28)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is *Grafton Local Environmental Plan 1988 (Amendment No 28)*.

2 Aims of plan

This plan aims:

- (a) to rezone the land to which this plan applies from Zone No 1 (c) (Rural/Residential Zone) to Zone No 2 (a) (Living Area Zone) under *Grafton Local Environmental Plan 1988*, and
- (b) to allow, with development consent, the land to be subdivided for residential purposes, subject to consideration of:
 - (i) potential soil contamination issues, and
 - (ii) buffer distance and design between nearby agricultural land and future residential development, and
 - (iii) management and treatment of stormwater drainage, and
 - (iv) potential dust nuisance from nearby unsealed roads.

3 Land to which plan applies

This plan applies to land being Lot 46 DP 751371 and Lots 1 and 2 DP 799823, 362 North Street, Grafton, as shown by distinctive colouring and edged heavy black on the map marked “Grafton Local Environmental Plan 1988 (Amendment No 28)” deposited in the office of the Council of the City of Grafton.

4 Amendment of Grafton Local Environmental Plan 1988

Grafton Local Environmental Plan 1988 is amended as set out in Schedule 1.

Grafton Local Environmental Plan 1988 (Amendment No 28)

Amendments

Schedule 1

Schedule 1 Amendments

(Clause 4)

[1] Clause 5 Definitions

Insert in appropriate order in the definition of *the map*:

Grafton Local Environmental Plan 1988 (Amendment No 28)

[2] Clause 42

Insert after clause 41:

42 Land in North Street, Grafton—restrictions on development

- (1) This clause applies to land being Lot 46 DP 751371 and Lots 1 and 2 DP 799823, 362 North Street, Grafton, as shown by distinctive colouring and edged heavy black on the map marked “Grafton Local Environmental Plan 1988 (Amendment No 28)” deposited in the office of the Council.
- (2) Consent must not be granted for development of land to which this clause applies unless the Council is satisfied that:
 - (a) the land does not contain chemical residues in soil exceeding the acceptable thresholds for residential habitation of that land, and
 - (b) any dwelling-houses on the land will be located no closer than 20 metres to the boundary of the land where it adjoins the Carr Street road reserve and that the use of land within the 20 metre setback will be compatible with the use of adjacent agricultural land, and
 - (c) stormwater generated by residential development on the land will be managed and treated on-site to limit the impacts of flow and pollutants on the local and downstream environment to pre-development levels consistent with the Stormwater Management Plan adopted by the Council, and
 - (d) the potential for dust nuisance from nearby unsealed roads will be mitigated.

Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)

under the

Environmental Planning and Assessment Act 1979

I, the Minister for Planning, make the following local environmental plan under the
Environmental Planning and Assessment Act 1979. (S00/01017/S69)

ANDREW REFSHAUGE, M.P.,
Minister for Planning

Clause 1 Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)

Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)

1 Name of plan

This plan is *Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)*.

2 Aims of plan

This plan aims:

- (a) to permit, with consent, the operation of a hairdressing salon, art and craft gallery and antique shop where located wholly within the existing buildings on certain land to which this plan applies, and
- (b) to permit, with consent, on the land to which this plan applies, the carrying out of development for the purpose of a coffee shop, health consulting rooms, home office and office premises, and
- (c) to limit the amount of floor area used for the purpose of a coffee shop, health consulting rooms or office premises (except where located wholly within an existing dwelling) on the land to which this plan applies, and
- (d) to require any development of certain land for commercial purposes to include the dedication of land as public road for the purposes of road re-alignment.

3 Land to which plan applies

This plan applies to the land within the Hornsby local government area, shown edged heavy black on the map marked "Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)" deposited in the office of Hornsby Council.

Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)

Clause 4

4 Amendment of Hornsby Shire Local Environmental Plan 1994

The *Hornsby Shire Local Environmental Plan 1994* is amended by inserting the following at the end of the Table to clause 22 (1):

No 943 Old Northern Road, Dural	Lot 3, DP 711920	Hairdressing salon where the use is wholly located within the external walls of the dwelling that existed on the date on which <i>Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)</i> took effect.
No 937 Old Northern Road, Dural	Lot 1, DP 618271	Art and craft gallery in accordance with a development consent granted prior to the making of this plan or antique shop where the use is wholly located within the external walls of the buildings that existed on the date on which <i>Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)</i> took effect and any land required by the Roads and Traffic Authority is dedicated as public road.
Nos 895–945 Old Northern Road and Nos 535–539 Galston Road, Dural	Land shown edged heavy black on the map marked “Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)”	Home office where any land required by the Roads and Traffic Authority is dedicated as public road.

Clause 4 Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)

Nos 895–945 Old Northern Road and Nos 535–539 Galston Road, Dural	Land shown edged heavy black on the map marked “Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)”	Not more than 2 premises (being coffee shops, health consulting rooms or office premises, or any combination of those) per allotment and where each such premises does not occupy a gross floor area of more than 100m ² or is wholly located within the external walls of a dwelling that existed on the date on which <i>Hornsby Shire Local Environmental Plan 1994 (Amendment No 72)</i> took effect and any land required by the Roads and Traffic Authority is dedicated as public road.
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Roads and Traffic Authority

ROADS ACT 1993

Notice under Clause 17 of the Roads Transport (Mass, Loading and Access) Regulation, 1996

Canterbury City Council, in pursuance of Division 2 of Part 3 of the Road Transport (Mass, Loading, Access) Regulation 1996, by this Notice, specify the routes and areas on or in which B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

BOB BULLIVANT,
Director of City Works,
Canterbury City Council
(by delegation from the Minister for Roads)

6 February 2003

SCHEDULE

1. Citation

This Notice may be cited as the Canterbury City Council B-Double Notice No 1/ 2003.

2. Commencement

This Notice takes effect from the date of gazettal.

3. Effect

This Notice remains in force until 1 July 2005 unless it is amended or repealed earlier.

4. Application

4.1 This Notice applies to B-Doubles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) regulation 1996 and Schedule 4 of the Road Transport (Vehicle Registration) Regulation 1998.

5. Routes

B-Double routes within the Canterbury City Council

Type	Road	Starting point	Finishing point
25	Belmore Rd, Riverwood, to 12 Wiggs Rd	M5 Motorway, Eastbound ramp	M5 Motorway, Westbound ramp.

Roads Act 1993

Notice under Clause 17 of the Road Transport (Mass, Loading and Access) Regulation, 1996

Coffs Harbour City Council, in pursuance of Division 2 of Part 3 of the *Road Transport (Mass, Loading and Access) Regulation 1996*, by this Notice, specify the routes and areas on or in which B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

Mark Ferguson
General Manager
Coffs Harbour City Council
(by delegation from the Minister for Roads)

Schedule

1. Citation

This Notice may be cited as the Coffs Harbour City Council B-Doubles Notice No 1/ 2003.

2. Commencement

This Notice takes effect from date of gazettal.

3. Effect

This Notice remains in force until 30 June 2003 unless it is amended or repealed earlier.

4. Application

4.1 This Notice applies to B-Doubles which comply with Schedule 1 to the Road Transport (Mass, Loading and Access) regulation 1996 and Schedule 4 to the Road Transport (Vehicle Registration) Regulation 1998.

5. Routes

B-Double routes within the Coffs Harbour City Council

Type	Road No	Road Name	Starting point	Finishing point	Conditions
25m	000	Hogbin Drive, Coffs Harbour	Christmas Bells Road	Hi-Tech Drive	<ul style="list-style-type: none"> • Access only between 2.00am-7.30am • 5 month gazettal up to 30/6/03
25m	000	Stadium Drive, Coffs Harbour	Hogbin Drive	Pacific Highway	<ul style="list-style-type: none"> • Access only between 2.00am-7.30am • 5 month gazettal up to 30/6/03
25m	000	Christmas Bells Road, Coffs Harbour	Hogbin Drive	End	<ul style="list-style-type: none"> • Access only between 2.00am-7.30am • 5 month gazettal up to 30/6/03
25m	000	Hi-Tech Drive, Coffs Harbour	Hogbin Drive	End	<ul style="list-style-type: none"> • Access only between 2.00am-7.30am • 5 month gazettal up to 30/6/03
25m	000	Craft Close, Coffs Harbour	Hi-Tech Drive	End	<ul style="list-style-type: none"> • Access only between 2.00am-7.30am • 5 month gazettal up to 30/6/03

ROADS ACT 1993

Section 10

Notice of Dedication of Land as Public Road at Dubbo in the Dubbo City Council area

THE Roads and Traffic Authority of New South Wales dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

D J Lorsch
Manager, Statutory Processes,
Roads and Traffic Authority of New South Wales.

SCHEDULE

All those pieces or parcels of land situated in the Dubbo City Council area, Parishes of Oxley and Dubbo and County of Gordon, shown as:

Lot 8 Deposited Plan 251110; and
Lots 23 and 24 Deposited Plan 251107.

(RTA Papers: 17/422.140)

ROADS ACT 1993

Section 10

Notice of Dedication of Land as Public Road at Mount Pleasant in the Wollongong City Council area

THE Roads and Traffic Authority of New South Wales dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

D J Lorsch
Manager, Statutory Processes,
Roads and Traffic Authority of New South Wales.

SCHEDULE

All those pieces or parcels of land situated in the Wollongong City Council area, Parish of Woonona and County of Camden, shown as Lots 8 to 14 inclusive Deposited Plan 793358.

(RTA Papers: 497.11232)

ROADS ACT 1993

Section 10

Notice of Dedication of Land as Public Road at Dourigans Gap in the Kyogle Council area

THE Roads and Traffic Authority of New South Wales dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

D J Lorsch
Manager, Statutory Processes,
Roads and Traffic Authority of New South Wales.

SCHEDULE

All those pieces or parcels of land situated in the Kyogle Council area, Parish of Wyndham and County of Rous, shown as Lots 19 to 28 inclusive Deposited Plan 1035324.

(RTA Papers: FPP 240.1507)

ROADS ACT 1993

Section 10

Notice of Dedication of Land as Public Road at Dubbo in the Dubbo City Council area

THE Roads and Traffic Authority of New South Wales dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

D J Lorsch
Manager, Statutory Processes,
Roads and Traffic Authority of New South Wales.

SCHEDULE

All that piece or parcel of land situated in the Dubbo City Council area, Parish of Dubbo and County of Lincoln, shown as Lot 3 Deposited Plan 532524.

(RTA Papers: 7/422.123)

ROADS ACT 1993

Section 10

Notice of Dedication of Land as Public Road at Swanbrook
in the Inverell Shire Council area

THE Roads and Traffic Authority of New South Wales
dedicates the land described in the schedule below as public
road under section 10 of the Roads Act 1993.

D J Lorsch
Manager, Statutory Processes,
Roads and Traffic Authority of New South Wales.

SCHEDULE

All those pieces or parcels of land situated in the Inverell
Shire Council area, Parish of Balaclava, County of Gough,
shown as Lots 21, 23, 24 and 28 Deposited Plan 778366.

(RTA Papers: 12/218.144)

ROADS ACT 1993

Section 10

Notice of Dedication of Land as Public Road at Hadleigh,
Sawyers Gully, Warialda, Spring Creek and Gravesend in
the Yallaro Shire Council area

THE Roads and Traffic Authority of New South Wales
dedicates the land described in the schedule below as public
road under section 10 of the Roads Act 1993.

D J Lorsch
Manager, Statutory Processes,
Roads and Traffic Authority of New South Wales.

SCHEDULE

All those pieces or parcels of land situated in the Yallaro
Shire Council area, Parishes of Vicars, Warialda, Balfour
and Gravesend, County of Burnett, shown as:

Lot 14 Deposited Plan 800518;
Lot 2 Deposited Plan 746510;
Lot 21 Deposited Plan 631212;
Lots 7 and 8 Deposited Plan 701240;
Lot 63 Deposited Plan 747267;
Lot 13 Deposited Plan 264444; and
Lots 1, 4 and 5 Deposited Plan 237536.

(RTA Papers: 12/512.1117)

Other Notices

CHILDREN (PROTECTION AND PARENTAL RESPONSIBILITY) ACT 1997

Safer Community Compact Order

I, the Honourable BOB DEBUS, Attorney General of the State of New South Wales, in pursuance of section 39 (1) of the Children (Protection and Parental Responsibility) Act 1997, do, by this my Order, approve the Blue Mountains Crime Prevention and Community Safety Plan as a Safer Community Compact for the purposes of Division 3 of Part 4 of that Act.

This Order takes effect on 7 February 2003 and remains in force until 6 February 2006.

Signed at Sydney, this 5th day of February 2003.

BOB DEBUS, M.P.,
Attorney General

CONTAMINATED LAND MANAGEMENT ACT 1997

Section 15 Declaration of Investigation Area Declaration Number 15018

THE Environment Protection Authority ("the EPA") declares the following land to be an investigation area under the Contaminated Land Management Act 1997 ("the Act"):

1. Land to which this declaration applies ("the site")

The site comprises the following area:

56 Clyde Street, Hamilton North, NSW, comprising Lot 11 of Deposited Plan 809439, in the local government area of Newcastle.

2. Reasons for the declaration

The EPA has reasonable grounds to believe that the site is contaminated in such a way as to present a significant risk of harm and makes this declaration for the following reasons:

- Elevated concentrations of volatile chlorinated compounds are present in groundwater at the northern boundary of the adjoining property that is located immediately to the south of the site (this adjoining property is identified as 54 Clyde Street);
- This contamination appears to have migrated onto 54 Clyde Street from the site since local groundwater flows in a southerly direction;
- The EPA is aware that the chlorinated compounds have been used at the site in the past.
- There is a risk that harm may be caused to persons working at the site through accidental exposure (by potential inhalation of vapours or dermal contact with the contaminated groundwater) to volatile chlorinated compounds that may accumulate in trenches/excavations at the site;
- The off-site migration of contaminated groundwater may potentially impact on residential users of bore water in the area; and

— The off-site migration of contaminated groundwater may also potentially degrade the water quality of Styx Creek (located within 500 m of the site) and ultimately the Hunter River and potentially cause harm to aquatic organisms.

3. Further action under the Act

The making of this declaration does not prevent the carrying out of a voluntary investigation of the area by one or more persons. Any person may submit a voluntary investigation proposal for the area to the EPA. If the proposal satisfies the requirements of s.19 of the Act, the EPA may agree to the proposal and agree not to issue an investigation order against that person or persons.

4. Submissions invited

The EPA advises that the public may make written submissions to the EPA on:

- Whether it should issue an investigation order in relation to the site; and/or
- Any other matter concerning the area.

Submissions should be made in writing to:

Acting Director Contaminated Sites
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

or faxed to: 02 9995 5930,

by not later than 21 March 2003.

CAROLYN STRANGE,
Acting Director Contaminated Sites,
Environment Protection Authority
(by delegation).

Dated: 21 February 2003.

NOTE:

Investigation order may follow

The EPA may issue an investigation order under s.17 of the Act.

Variation/Revocation

This declaration may be varied by subsequent declarations. It remains in force until it is revoked. A declaration may only be revoked when the EPA does not have reasonable grounds to believe that land is contaminated in such a way as to present a significant risk of harm (s.44 of the Act).

Information recorded by the EPA

Section 58 of the Act requires the EPA to maintain a public record. A copy of this investigation declaration will be included in the public record.

Information recorded by councils

Section 59 of the Act requires the EPA to give a copy of this declaration to the relevant local council. The council is then required to note on its planning certificate issued pursuant to s.149 (2) of the Environmental Planning and

Assessment Act 1979 that the land is currently within a declaration area. The EPA is required to notify council as soon as practicable when the declaration is no longer in force and the notation on the s.149 (2) certificate can be removed.

Voluntary investigation

The making of this declaration does not prevent the carrying out of a voluntary investigation of the site by any person.

CONTAMINATED LAND MANAGEMENT ACT 1997

Section 21

Declaration of Remediation Site Declaration Number 21034

THE Environment Protection Authority ("the EPA") declares the following land to be a remediation site under the Contaminated Land Management Act 1997 ("the Act"):

1. Land to which this declaration applies ("the site")

The site comprises the following area:

54 Clyde Street, Hamilton North, NSW, comprising Lot 102 of Deposited Plan 1024980 in the local government area of Newcastle.

2. Nature of the substances causing the contamination ("the contaminants"):

Volatile chlorinated hydrocarbons (including trichloroethene, dichloroethenes and vinyl chloride), lead and zinc.

3. Nature of harm that the substance may cause:

The EPA has considered the matters in s.9 of the Act and has found that:

- Groundwater at the site is contaminated with volatile chlorinated compounds, lead and zinc at concentrations that exceed the ANZECC (2000) Water Quality Guidelines criteria for the protection of aquatic ecosystems. Vinyl chloride (a known human carcinogen) is also present in the groundwater at concentrations that exceed the NHMRC (1996) Drinking Water Guidelines; and
- Contaminated groundwater has migrated from the vicinity of the northern boundary of the site to the vicinity of the southern (down-gradient) boundary of the site.

The EPA has found that the contamination at the site presents a significant risk of harm to human health and the environment. In particular:

- There is a risk that harm may be caused to persons working at the site through accidental exposure (by potential inhalation of vapours or dermal contact with the contaminated groundwater) to volatile chlorinated compounds that may accumulate in trenches/excavations at the site;
- There is the potential for continued off-site migration of contaminated groundwater into adjoining Council land and residential areas;
- The off-site migration of contaminated groundwater may potentially impact on residential users of bore water in the area; and

- The off-site migration of contaminated groundwater may also potentially degrade the water quality of Styx Creek (located within 500 m of the site) and ultimately the Hunter River and potentially cause harm to aquatic organisms.

4. Further action under the Act

The making of this declaration does not prevent the carrying out of a voluntary remediation of the site and any person may submit a voluntary remediation proposal for the site to the EPA. If the proposal satisfies the requirements of s.26 of the Act, the EPA may agree not to issue a remediation order to the person or persons bringing the proposal.

5. Submissions invited

The EPA advises that the public may make written submissions to the EPA on:

- Whether the EPA should issue a remediation order in relation to the site or
- Any other matter concerning the site.

Submissions should be made in writing to:

Acting Director Contaminated Sites
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

or faxed to: 02 9995 5930,

by not later than 21 March 2003.

CAROLYN STRANGE,
Acting Director Contaminated Sites,
Environment Protection Authority
(by delegation).

Dated: 21 February 2003.

NOTE:

Remediation order may follow

If remediation of the site or part of the site is required, the EPA may issue a remediation order under s.23 of the Act.

Variation/Revocation

This declaration remains in force until it is otherwise varied or revoked. A declaration may only be revoked when the EPA does not have reasonable grounds to believe that land is contaminated in such a way as to present a significant risk of harm (s.44 of the Act).

Information recorded by the EPA

Section 58 of the Contaminated Land Management Act 1997 requires the EPA to maintain a public record. A copy of this remediation declaration will be included in the public record.

Information recorded by councils

Section 59 of the Act requires the EPA to inform the relevant local council that this declaration has been made, as soon as practicable. The council is then required to note on its planning certificate issued pursuant to s.149 (2) of the Environmental Planning and Assessment Act that the land is currently within a remediation area. The EPA is required to notify council as soon as practicable when the declaration is no longer in force and the notation on the s.149 (2) certificate can be removed.

DISTRICT COURT RULES 1973

Appointment

IN pursuance of Part 2, Rule 2 (1) of the District Court Rules 1973, I appoint the following vacation period:

Summer vacation for 2003/2004 shall commence on 20 December 2003 and conclude on 1 February 2004.

Dated at Sydney, this 12th day of February 2003.

R. O. BLANCH,
Chief Judge.

DISTRICT COURT ACT 1973District Court of New South Wales
Direction

PURSUANT to section 32 of the District Court Act 1973, I direct that the District Court shall sit in its civil jurisdiction at all Courts and at the times that I have directed the Court sit in its criminal jurisdiction during the financial year 2003-2004 and pursuant to section 173 of the District Court Act 1973, I direct that the District Court shall also sit in its criminal jurisdiction at all Courts and at the times that I have directed the Court sit in its civil jurisdiction during the financial year 2003-2004.

Dated this 12th day of February 2003 .

R. O. BLANCH,
Chief Judge.

DISTRICT COURT ACT 1973District Court of New South Wales
Direction

IN pursuance of section 32 (3) of the District Court Act 1973, I direct that for the financial year 2003-2004 all proceedings (other than proceedings before the Registrar), in the District Court of New South Wales in relation to which the proper place is a place specified in Column 1 hereunder shall be continued by the Court sitting at the place specified opposite that place in Column 2 hereunder:

Column 1	Column 2
Bourke	Dubbo
Braidwood	Queanbeyan
Casino	Lismore
Cessnock	Maitland
Cobar	Dubbo
Condobolin	Forbes
Cooma	Queanbeyan
Coonamble	Dubbo
Cootamundra	Wagga Wagga
Corowa	Albury
Cowra	Orange
Deniliquin	Albury
Glen Innes	Armidale
Gundagai	Wagga Wagga
Gunnedah	Tamworth
Hay	Griffith
Inverell	Armidale

Column 1

Kempsey
Leeton
Liverpool
Moruya
Moss Vale
Mudgee
Murwillumbah
Muswellbrook
Narrabri
Narrandera
Nyngan
Parkes
Quirindi
Scone
Singleton
Tumut
Walgett
Wellington
Wentworth
Wyalong
Yass
Young

Column 2

Port Macquarie
Griffith
Sydney
Bega
Goulburn
Dubbo
Lismore
Maitland
Moree
Griffith
Dubbo
Forbes
Tamworth
Maitland
Maitland
Wagga Wagga
Dubbo
Dubbo
Broken Hill
Griffith
Queanbeyan
Wagga Wagga

Dated at Sydney, this 12th day of February 2003.

R. O. BLANCH,
Chief Judge.

GEOGRAPHICAL NAMES ACT 1966

PURSUANT to the provisions of section 8 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it proposes to assigned the geographical name listed hereunder as a geographical name.

Any person objecting to this proposal may within one (1) month of the date of this notice give to the Secretary of the Board, notice in writing of that objection, setting out the grounds of the objection.

Proposed Name:	Dolphins Point.
Designation:	Point.
L.G.A.:	Randwick.
Parish:	Alexandria.
County:	Cumberland.
Latitude:	33-55-18.
Longitude:	151-15-34.
L.P.I. Map:	Bondi.
100,000 Map:	Sydney 9130.
Reference:	GNB4937.

The position and extent of this feature is recorded and shown within the Geographical Names Register of New South Wales. This information can be accessed through the Board's web sit at www.gnb.nsw.gov.au .

WARWICK WATKINS,
Chairman.

Geographical Names Board,
PO Box 143, Bathurst 2795.

GEOGRAPHICAL NAMES ACT 1966

PURSUANT to the provisions of section 8 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it proposes to assign the names listed hereunder as geographical names.

Any person wishing to make comment upon these proposals may within one (1) month of the date of this notice, write to the Secretary of the Board with that comment.

Proposed Name: Whimbrel Park.
Designation: Reserve.
L.G.A.: Great Lakes Council.
Parish: Nerong.
County: Gloucester.
L.P.I. Map: The Branch.
1:100,000 Map: Port Stephens 9332.
Reference: GNB4930.

Proposed Name: Redbill Park.
Designation: Reserve.
L.G.A.: Great Lakes Council.
Parish: Nerong.
County: Gloucester.
L.P.I. Map: The Branch.
1:100,000 Map: Port Stephens 9332.
Reference: GNB4930.

Proposed Name: Heron Park.
Designation: Reserve.
L.G.A.: Great Lakes Council.
Parish: Nerong.
County: Gloucester.
L.P.I. Map: The Branch.
1:100,000 Map: Port Stephens 9332.
Reference: GNB4930.

Proposed Name: Waterhen Park.
Designation: Reserve.
L.G.A.: Great Lakes Council.
Parish: Nerong.
County: Gloucester.
L.P.I. Map: The Branch.
1:100,000 Map: Port Stephens 9332.
Reference: GNB4930.

Proposed Name: Nerong Inlet.
Designation: Inlet.
L.G.A.: Great Lakes Council.
Parish: Nerong.
County: Gloucester.
L.P.I. Map: The Branch.
1:100,000 Map: Port Stephens 9332.
Reference: GNB4930.

Proposed Name: Mavromattes Reserve.
Designation: Reserve.
L.G.A.: Shoalhaven City Council.
Parish: Nowra.
County: St Vincent.
L.P.I. Map: Berry.
1:100,000 Map: Kiama 9028.
Reference: GNB4929.

Proposed Name: Midgen Environment Park.
Designation: Reserve.
L.G.A.: Byron Shire Council.
Parish: Byron.
County: Rous.
L.P.I. Map: Byron Bay.
1:100,000 Map: Ballina 9640.
Reference: GNB4931.

Proposed Name: Jos Wiggins Park.
Designation: Reserve.
L.G.A.: Botany Bay City Council.
Parish: Botany.
County: Cumberland.
L.P.I. Map: Botany Bay.
1:100,000 Map: Sydney 9130.
Reference: GNB4928.

Proposed Name: Jim Scott Park.
Designation: Reserve.
L.G.A.: Penrith City Council.
Parish: Mulgoa.
County: Cumberland.
L.P.I. Map: Penrith.
1:100,000 Map: Penrith 9030.
Reference: GNB4933.

Proposed Name: Eileen Cammack Soccer Fields.
Designation: Reserve.
L.G.A.: Penrith City Council.
Parish: Mulgoa.
County: Cumberland.
L.P.I. Map: Penrith.
1:100,000 Map: Penrith 9030.
Reference: GNB4933.

Proposed Name: Lipscomb Reserve.
Designation: Reserve.
L.G.A.: Hornsby Shire Council.
Parish: South Colah.
County: Cumberland.
L.P.I. Map: Hornsby.
1:100,000 Map: Sydney 9130.
Reference: GNB4927.

Proposed Name: Ulolo Community Park.
Designation: Reserve.
L.G.A.: Hornsby Shire Council.
Parish: South Colah.
County: Cumberland.
L.P.I. Map: Hornsby.
1:100,000 Map: Sydney 9130.
Reference: GNB4927.

Proposed Name: Pelaw Main Centenary Park.
Previous Name: Pelaw Main Park.
Designation: Reserve.
L.G.A.: Cessnock City Council.
Parish: Stanford.
County: Northumberland.
L.P.I. Map: Cessnock.
1:100,000 Map: Cessnock 9132.
Reference: GNB4926.

The position and the extent for these features are recorded and shown within the Geographical Names Register of New South Wales. This information can be accessed through the Board's Web Site at www.gnb.nsw.gov.au.

WARWICK WATKINS,
Chairperson

Geographical Names Board,
PO Box 143, Bathurst NSW 2795.

HERITAGE ACT 1977

Direction Pursuant to Section 34 (1) (A)
to List an Item on the State Heritage Register

Old Government Cottages Group at Bathurst
SHR No. 1659

IN pursuance of section 34 (1) (a) of the Heritage Act 1977, I, the Minister for Planning, having considered a recommendation of the Heritage Council of New South Wales, direct the Council to list the item of the environmental heritage specified in Schedule "A" on the State Heritage Register. This listing shall apply to the curtilage or site of the item, being the land described in Schedule "B".

Dated: Sydney, 11th February 2003.

ANDREW REFSHAUGE,
Minister for Planning

SCHEDULE "A"

The property known as Old Government Cottages Group at Bathurst, situated on the land described in Schedule "B".

SCHEDULE "B"

All those pieces or parcels of land known as Lots 1 and 2 of DP 788005, Parish of Bathurst, County of Bathurst.

HERITAGE ACT 1977

Direction Pursuant to Section 34 (1) (A)
to List an Item on the State Heritage Register

Linnwood at Guildford
SHR No. 1661

IN pursuance of section 34 (1) (a) of the Heritage Act 1977, I, the Minister for Planning, having considered a recommendation of the Heritage Council of New South Wales, direct the Council to list the item of the environmental heritage specified in Schedule "A" on the State Heritage Register. This listing shall apply to the curtilage or site of the item, being the land described in Schedule "B".

Dated: Sydney, 10th February 2003.

ANDREW REFSHAUGE,
Minister for Planning

SCHEDULE "A"

The property known as Linnwood at Guildford, situated on the land described in Schedule "B".

SCHEDULE "B"

All those pieces or parcels of land known as Lot 1, DP 169485 and Lot 1, DP 183017, Parish of St John, County of Cumberland.

HERITAGE ACT 1977

Direction Pursuant to Section 34 (1) (A)
to List an Item on the State Heritage Register

Scone Civic Theatre
SHR No. 1660

IN pursuance of section 34 (1) (a) of the Heritage Act 1977, I, the Minister for Planning, having considered a recommendation of the Heritage Council of New South Wales, direct the Council to list the item of the environmental heritage specified in Schedule "A" on the State Heritage Register. This listing shall apply to the curtilage or site of the item, being the land described in Schedule "B".

Dated: Sydney, 11th February 2003.

ANDREW REFSHAUGE,
Minister for Planning

SCHEDULE "A"

The property known Scone Civic Theatre, situated on the land described in Schedule "B".

SCHEDULE "B"

All those pieces or parcels of land known as section 18, Part Lot 4, DP 59658, in the Parish of Scone, County of Brisbane.

HERITAGE ACT 1977

Interim Heritage Order No. 00070

In pursuance of section 24 of the Heritage Act 1977, I, the Minister for Planning, do, by this my Order:

- (i) make an interim heritage order in respect of the item of the environmental heritage specified or described in Schedule 'A'; and
- (ii) declare that the interim heritage order shall apply to the curtilage or site of such item, being the land described in Schedule 'B'.

Dated: Sydney, 17th February 2003.

ANDREW REFSHAUGE, M.P.,
Minister for Planning

SCHEDULE 'A'

The property known as the Merewether Beach Pavilion, situated at Memorial Drive, Merewether, on the land described in Schedule 'B'.

SCHEDULE 'B'

All those pieces or parcels of land shown edged heavy black on the plan catalogued HC 1907 in the office of the Heritage Council of New South Wales.

LOCAL GOVERNMENT ACT 1993

DETERMINATION

I, the Hon. HARRY WOODS M.P., Minister for Local Government, in pursuance of the Governor's Proclamation made under the Local Government Act 1993 and published in *Government Gazette* No. 237 of 29 November 2002, commencing at page 10298, do hereby make the following Determination relating to the transfer of assets, rights and liabilities between the Woollahra Municipal Council and the Waverley Council to give effect to the boundary alteration made by the Proclamation transferring land from the Area of Woollahra to the Area of Waverley.

SCHEDULE

1. Bonds and security deposits held by Woollahra Municipal Council which relate to works, services agreements and contracts in the transfer area shall be paid to Waverley Council on or before 15 April 2003. Bank guarantees shall be assigned to Waverley Council.
2. The balance of funds held in trust by Woollahra Municipal Council at 13 February 2003 in the Bondi Junction Commercial Centre Section 94 Plan together with interest accumulated thereto shall be paid to Waverley Council on or before 15 April 2003. Interest that accrues on these funds between 13 February 2003 and the date they are paid to Waverley shall also be transferred to Waverley.
3. Section 94 contributions held by Woollahra Municipal Council, other than those held in trust by the Council for the Bondi Junction Commercial Centre Section 94 Plan, shall remain with Woollahra Municipal Council, and shall be used to contribute to the capital cost of open space facilities, public recreation facilities, and civic works across the Area of Woollahra.
4. In addition to the funds held in trust by Woollahra Municipal Council for the Bondi Junction Commercial Centre Section 94 Plan, Woollahra Municipal Council shall:
 - Transfer the balance of funds held in trust by Woollahra Municipal Council as at 13 February 2003 (including accumulated interest) in any other trust directly related to works, interests and operations in Bondi Junction; and
 - Shall apportion the balance of any other trust if such trust funds have a proportional applicability to works, interests, and operations in Bondi Junction.
5. The balance of the following Reserves certified as available at 30 June 2002 in Woollahra Municipal Council's audited Statement of Accounts for 2001/2002 shall be apportioned between Waverley Council and Woollahra Municipal Council so that the balance of the reserve is split such that:
 - from 50% of the balance Waverley Council receives a percentage of those funds equivalent to the percentage of the total yield of Woollahra Municipal Council's rates that was raised in that year from properties in the transfer area;
 - and from 50% of the balance Waverley Council receives one per cent of those funds, based on the proportion of Woollahra's total area being transferred to Waverley on 13 February 2003.
6. The balance of Woollahra Municipal Council's Insurance Levy Reserve, certified as available at 30 June 2002 in Woollahra Municipal Council's audited Statement of Accounts for June 2001/2002 (after taking into account the assessed liability of Woollahra Municipal Council in relation to Premsure) should be apportioned between Waverley Council and Woollahra Municipal Council so that the balance of the Reserve is split such that:
 - from 50% of the balance Waverley Council receives a percentage of those funds equivalent to the percentage of the total yield of Woollahra Municipal Council rates that was raised in that year from properties in the transfer area;
 - and from 50% of the balance Waverley Council receives one per cent of those funds, based on the proportion of Woollahra's total area being transferred to Waverley on 13 February 2003.
7. Woollahra Municipal Council will continue until 30 June 2003 to issue rate instalment notices to the properties in the transferred area, collect the rates and raise interest on any outstanding rates.
8. Woollahra Municipal Council will process any pension rebate application with a commencement/effective date prior to 1 April 2003. Applications relating to an entitlement to a rebate commencing on 1 July 2003 will be forwarded to Waverley Council for processing prior to the levying of 2003/2004 rates.
9. In consideration of services in 7 and 8 above, Waverley Council will pay Woollahra Municipal Council a fee for service.
10. Rates levied for the 2002/2003 year in the transferred area shall be apportioned on a pro rata basis with Waverley Council receiving 137/365 of the rates levied and Woollahra Municipal Council receiving 228/365 of the rates levied with each Council receiving a proportionate amount of any supplementary levies or strata subdivision based on their effective date or registration date respectively.
11. Woollahra Municipal Council will pay to Waverley Council on or before 31 August 2003 the amount of rates apportioned as set out in 10 above.
12. Waverley Council will pay to Woollahra Municipal Council on or before 31 August 2003 the amount of any rates outstanding on properties in the transfer area as at 30 June 2003 including interest accrued.
13. Woollahra Municipal Council will receive, process and issue Section 603 certificates for properties in the transferred area until 30th June 2003. The income received from the certificates processed will be retained by Woollahra Municipal Council.
14. Woollahra Municipal Council will continue until 30 June 2003 to issue and collect Domestic Waste charges to the properties in the transferred area. In consideration of this service Waverley Council will pay Woollahra Municipal Council a fee for service.

15. Domestic Waste charges for the 2002/2003 year in the transferred area shall be apportioned on a pro rata basis with Waverley Council receiving 137/365 of the annual charges and Woollahra Municipal Council receiving 228/365 of the annual charges.
16. Woollahra Municipal Council will pay to Waverley Council on or before 31 August 2003 the amount of Domestic Waste charges apportioned as set out in 15 above.
17. Waverley Council will pay to Woollahra Municipal Council on or before 31 August 2003 the amount of any Domestic Waste charges outstanding for properties in the transfer area as at 30 June 2003, including interest accrued.
18. The request by Woollahra Municipal Council for a special rating variation to allow annual general income to increase by the percentage necessary to maintain the general income level prior to the boundary alteration with effect from 1 July 2003 is approved.
19. Waverley Council will pay to Woollahra Municipal Council on or before 15 April 2003 for any income outstanding as at 13 February 2003 due to Woollahra Municipal Council for any lease, licence agreement or contract transferred to Waverley Council as a consequence of the boundary adjustment.
20. Woollahra Municipal Council will pay to Waverley Council on or before 15 April 2003 for any income prepaid beyond the 13 February 2003 for any lease, licence agreement or contract transferred to Waverley Council as a consequence of the boundary adjustment.
21. The rights and interests of Woollahra Municipal Council in leases, licences, agreements and contracts with respect to Bondi Junction shall be assigned to Waverley. The transfer vests in Waverley Council the lease to Westfield for construction under Oxford Street and for construction of an elevated pedestrian walkway over Oxford Street.
22. Woollahra Municipal Council will pay for any material or services ordered and received prior to 13 February 2003 related to services and assets transferred as a result of the boundary changes.
23. Waverley Council will pay for any material or services ordered and received from 13 February 2003 related to services and assets transferred as a result of the boundary changes.
24. Services related to the transfer area which have been ordered but not fully delivered by 13 February 2002 will be paid for by Waverley Council and/or Woollahra Municipal Council proportionately in accordance with the amount of the service completed before and after 13 February 2002.
25. On and from 13 February 2003 the applications, files and records related to the transferred area become the property of Waverley Council.
26. Waverley Council will pay for the storage and retrieval costs of the transferred applications, files and records from 13 February 2003.
27. Woollahra Municipal Council will keep the applications, files and records in safe storage until Waverley Council takes physical possession or arranges transfer to a Waverley Council storage facility.
28. Waverley Council will arrange to take physical possession of the transferred records or transfer to a Waverley Council storage facility by 15 April 2003.
29. As a result of the Boundary adjustment there will be no transfer of loans as Woollahra Municipal Council is debt-free.
30. As a result of the Boundary adjustment there will be no transfer of sinking funds as Woollahra Municipal Council has indicated there are no sinking funds.
31. Woollahra Municipal Council agrees to Spencer Steer auditing the financial transactions resulting from the transfer.
32. Where a dispute arises after 13 February 2002 between Waverley Council and Woollahra Municipal Council about aspects of the transfer the Councils will in the first instance have the dispute mediated. Each Council agrees to participate in mediation within 28 days of formal notification of a dispute. Each council must agree on the mediator appointed. The cost of mediation will be shared equally between the Councils.
33. Any dispute arising after 13 February 2003 which cannot be successfully mediated will be referred to the Director General of the Department of Local Government for arbitration.
34. No staff in the employment of Woollahra Municipal Council will be transferred.
35. No plant or equipment will be physically transferred.
36. The written down value of Woollahra Municipal Council's mobile plant and equipment as at 30 June 2002 will be apportioned between Woollahra Municipal Council and Waverley Council so that the balance of the Reserve is split such that:
 - from 50% of the balance Waverley receives a percentage of those funds equivalent to the percentage of the total yield of Woollahra rates that was raised in that year from properties in the transfer area;
 - and from 50% of the balance Waverley receives one per cent of those funds, based on the proportion of Woollahra's total area being transferred to Waverley on 13 February 2003.
37. All furniture, office equipment and fittings located in the transfer area will be transferred to Waverley Council.
38. On and from the 13 February 2003 all land, roads, fixed assets, property, buildings, and strata titles which were held by or vested in Woollahra Municipal Council on 13 February 2003 and as from 14 February is located in Waverley Council area shall be held by or vested in Waverley Council except for the asset known as Grafton Street car park which will continue to be held by and/or vested in Woollahra Municipal Council.
39. By 15 April 2003 Woollahra Municipal Council will settle all outstanding accounts with Waverley Council for services provided by Waverley Council to Woollahra Municipal Council in relation to:
 - Bondi Junction Town Centre Management
 - Bondi Junction Mall Cleaning
 - Bondi Junction development costs to date
 - Any other outstanding accounts.

Dated this 13th day of February 2003.

HARRY WOODS, M.P.,
Minister for Local Government

NATIONAL PARKS AND WILDLIFE ACT 1974

**LAND ACQUISITION (JUST TERMS
COMPENSATION) ACT 1991**

Notice of Compulsory Acquisition

THE Minister for the Environment, with the approval of His Excellency the Lieutenant Governor, declares that the land described in the Schedule below is acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991, for the purposes of the National Parks and Wildlife Act 1974.

The land is, on publication of this notice, vested in the Minister administering the National Parks and Wildlife Act 1974.

BOB DEBUS, M.P.,
Minister for the Environment

—————
SCHEDULE

County Camden, Parish Bundanoon, Local Government Area Wingecarribee, 7.842 hectares, being Lot 21, DP 1044299, also being part of the land comprised in Certificate of Title Folio Identifier 2/838630; NPWS F/4017.

NATIONAL PARKS AND WILDLIFE ACT 1974

PROCLAMATION

I, Professor MARIE BASHIR, A.C., Governor of the State of New South Wales, with the advice of the Executive Council and in pursuance of the powers vested in me under section 68 of the National Parks and Wildlife Act 1974, with the consent of every owner and occupier do, on the recommendation of the Director-General of National Parks and Wildlife, by this my Proclamation declare the lands described hereunder to be a wildlife refuge for the purposes of the abovementioned Act.

To be known as "Demon Valley Wildlife Refuge".

Signed and Sealed at Sydney, this 5th day of February 2003.

MARIE BASHIR,
Governor

By Her Excellency's Command,

BOB DEBUS, M.P.,
Minister for the Environment

GODSAVE THE QUEEN!

—————
Description

*Land District — Tenterfield;
Council — Tenterfield.*

County Clive, Parish Bloxsome, 296.19 hectares, being Lots 19, 27, 37 and 38, DP 751496 and Lot 62, DP 621146. NPWS 02/10042.

POISONS AND THERAPEUTIC GOODS ACT 1966

Order Under Clause 171 (1)
Poisons and Therapeutic Goods Regulation 2002
Withdrawal of Drug Authority

IN accordance with the provisions of clause 171 (1) of the Poisons and Therapeutic Goods Regulation 2002, an Order has been made on Peter Robert NOACH of 16 Lamming Place, St Marys 2070, prohibiting him, until further notice, as a nurse from having possession of and supplying drugs of addiction as authorised by Clauses 101 and 103 of the Regulation. This Order is to take effect on and from Wednesday, 19 February 2003

ROBYN KRUK,
Director-General.

Department of Health, New South Wales.
Sydney, Friday, 14 February 2003.

PUBLIC WORKS ACT 1912

**LAND ACQUISITION (JUST TERMS
COMPENSATION) ACT 1991**

Compulsory Acquisition
Nambucca Heads Sewerage Augmentation

THE Minister for Land and Water Conservation, with the approval of Her Excellency the Governor, declares that the interest in land described in the Schedule hereto, is acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991, for an authorised work.

On publication of this notice in the *Government Gazette* the interest in land is vested in the Minister for Land and Water Conservation as Constructing Authority under section 4 of the Public Works Act 1912.

JOHN AQUILINA, M.P.,
Minister for Land and Water Conservation
and Minister for Fair Trading

—————
SCHEDULE

Interest in Land

Easement rights as described under the heading Sewer Pipeline in Memorandum E931212, filed in the Office of Land and Property Information NSW over the site shown in:

Deposited Plan 1042764 (SB55272) as '(C) PROPOSED
EASEMENT FOR SEWER PIPELINE 2 WIDE'.

DPWS Reference: 177.

RURAL LANDS PROTECTION ACT 1998

Stock Warning Signs

NOTICE is hereby given that the State Council of Rural Lands Protection Boards has approved of the types of temporary stock zone signs referred to in the Schedule herewith pursuant to Part 4, Division 1, Clause 15 (1) of the Rural Lands Protection (General) Regulation 2001.

Dated: 14 February 2003.

STEVE ORR,
Chief Executive Officer,
State Council of Rural Lands Protection Boards.

SCHEDULE

Each of the signs depicted below must be constructed of:

- (1) rigid metal, heavy duty plastic, corflute or other rigid and durable material; or
- (2) durable material which can be folded or rolled and which is securely held by a frame and/or posts while unfolded or unrolled,

when used as a temporary stock zone sign under the Regulation.

The dimensions of each of the signs is to be at least 750 millimetres along each side.

The particulars are to be coloured black on a yellow background.

A sign that is depicting the information shown in Diagrams C or F is to be made of reflective material if it is displayed at night.



Diagram A



Diagram B

AHEAD



Diagram C

NEXT 5KM

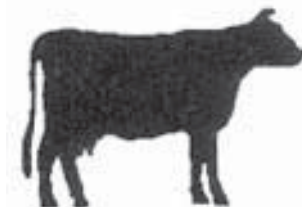


Diagram D

NEXT 5KM



Diagram E

NEXT 5 KM



Diagram F

Alternatively, stock warning signs of a dimension and type prescribed under the Australian Road Rules may be used.

THREATENED SPECIES CONSERVATION ACT 1995

Notice of Preliminary Determinations

THE Scientific Committee, established by the Threatened Species Conservation Act, has made Preliminary Determinations to support proposals to list the following in the relevant Schedules of the Act.

Endangered Species (Part 1 of Schedule 1)

Centranthera cochinchinensis (Lour.) Merr., a herb

Cupaniopsis serrata (F. Muell.) Radlk., a small tree

Elyonurus citreus (R. Br.) Munro ex Benth., a perennial grass

Hibbertia puberula Toelken, a shrub

The Committee is of the opinion that these species are likely to become extinct in nature in NSW unless the circumstances and factors threatening their survival or evolutionary development cease to operate.

Any person may make a written submission regarding these Preliminary Determinations, which should be forwarded to:

Scientific Committee

PO Box 1967

Hurstville NSW 2220

Attention: Suzanne Chate, Executive Officer.

Submissions must be received by 28th March 2003.

Copies of these Determinations may be inspected at National Parks and Wildlife Service Area Offices or Visitors Centres and at the National Parks Centre, 102 George Street, The Rocks, Sydney, during business hours.

Associate Professor PAUL ADAM,
Chairperson,
Scientific Committee.

Determinations are also on the NPWS web site www.npws.nsw.gov.au/news/exhbtsc.htm

THREATENED SPECIES CONSERVATION ACT 1995

Notice of Final Determination

THE Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to reject a proposal to list the Marble-faced Delma, *Delma australis* Luge (1974), as a VULNERABLE SPECIES on Schedule 2 of that Act.

The Committee has found that this species has such a limited extent of occurrence and is found at a small number of locations and the populations are severely fragmented. The Committee proposes to make a Preliminary Determination to list this species as an Endangered Species.

Copies of this Determination may be inspected at National Parks and Wildlife Service Area Offices or Visitors Centres and at the National Parks Centre, 102 George Street, The Rocks, Sydney, during business hours.

Notice of Preliminary Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Preliminary Determination to support a proposal to list the Marble-faced Delma, *Delma australis* Luge (1974), as an ENDANGERED SPECIES in Part 1 of Schedule 1 of the Act.

The Committee is of the opinion that this species is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Copies of this Determination may be inspected at National Parks and Wildlife Service Area Offices or Visitors Centres and at the National Parks Centre, 102 George Street, The Rocks, Sydney, during business hours.

Any person may make a written submission which should be forwarded to:

Scientific Committee
PO Box 1967
Hurstville NSW 2220

Attention: Suzanne Chate, Executive Officer.

Submissions must be received by 28th March 2003.

Associate Professor PAUL ADAM,
Chairperson,
Scientific Committee.

Determinations are also on the NPWS web site www.npws.nsw.gov.au/news/exhbtsc.htm

THREATENED SPECIES CONSERVATION ACT 1995

Notice of Final Determination

THE Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to reject a proposal to list the Mallee Slender Blue-tongue Lizard, *Cyclodomorphus melanops elongatus* (Werner 1910) as a VULNERABLE SPECIES on Schedule 2 of that Act.

The Committee has found that this species has such a limited extent of occurrence and is found at a small number of locations and the populations are severely fragmented. The Committee proposes to make a Preliminary Determination to list this species as an Endangered Species.

Copies of this Determination may be inspected at National Parks and Wildlife Service Area Offices or Visitors Centres and at the National Parks Centre, 102 George Street, The Rocks, Sydney, during business hours.

Notice of Preliminary Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Preliminary Determination to support a proposal to list the Mallee Slender Blue-tongue Lizard, *Cyclodomorphus melanops elongatus* (Werner, 1910) as an ENDANGERED SPECIES in Part 1 of Schedule 1 of the Act, and as a consequence, omit reference to Günther's Skink, *Cyclodomorphus branchialis* (Günther 1867), as a Vulnerable Species.

The Committee is of the opinion that this species is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Copies of this Determination may be inspected at National Parks and Wildlife Service Area Offices or Visitors Centres and at the National Parks Centre, 102 George Street, The Rocks, Sydney, during business hours.

Any person may make a written submission which should be forwarded to:

Scientific Committee
PO Box 1967
Hurstville NSW 2220

Attention: Suzanne Chate, Executive Officer.

Submissions must be received by 28th March 2003.

Associate Professor PAUL ADAM,
Chairperson,
Scientific Committee.

Determinations are also on the NPWS web site www.npws.nsw.gov.au/news/exhbtsc.htm

THREATENED SPECIES CONSERVATION ACT 1995

NSW National Parks and Wildlife Service
Notice of Approval of the *Acacia pubescens* Recovery
Plan

THE National Parks and Wildlife Service hereby gives notice of the exhibition of the approved *Acacia pubescens* Recovery Plan. Information relating to the sale and inspection of the recovery plan will be published during the week commencing 24 February 2003, in the *Auburn Pictorial Review*, *Parramatta Advertiser*, *Bankstown Canterbury Torch*, *Hawkesbury Gazette* and *Liverpool City Champion*.

LOU EWINS,
Manager,
Conservation Planning and Programs Division,
Central Directorate.

TRANSPORT ADMINISTRATION ACT 1988 LAND ACQUISITION (JUST TERMS COMPENSATION) ACT 1991

Notice of Compulsory Acquisition of Land for the Purposes of the State Rail Authority of New South Wales
THE State Rail Authority of New South Wales, with the approval of Her Excellency the Governor, declares that the sub-surface stratum land described in the Schedule hereto is acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991, for the purposes of the State Rail Authority, as authorised by the Transport Administration Act 1988, being for underground rail facilities in connection with the Parramatta Rail Link.

The Minister responsible for the State Rail Authority of New South Wales is satisfied that the State Rail Authority of New South Wales requires immediate vacant possession of the land described in the Schedule.

Dated this 17th day of January 2003.

HOWARD LACY,
Chief Executive.

—————
SCHEDULE

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1047432, having an area of 1630 square metres or thereabouts and said to be in the possession of J. and J. Finlay and Alan Burton.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1047430, having an area of 895.9 square metres or thereabouts and said to be in the possession of C. J. Jones, Joy Jones, Hugh and Susan Wray and P. and D. Haire.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1047431, having an area of 429.6 square metres or thereabouts and said to be in the possession of P. G. and K. S. Thompson.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1047433, having an area of 2419 square metres or thereabouts and said to be in the possession of A. and J. Bull, Elizabeth Louise Hazlewood, G. and R. Lucas and Kathryn Louise Switzer.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1047538, having an area of 1236 square metres or thereabouts and said to be in the possession of D. G. and R. E. Jones, Rainny Limanto and Stuart Paterson.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1047539, having an area of 2333 square metres or thereabouts and said to be in the possession of Deborah Watson, J. M. Eastman, David Geoffrey Eastman, Ian Roger Eastman, Robyn Linda Eastman, Sarah Jane Gregory and A. and B. Mindel.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1048309, having an area of 1395 square metres or thereabouts and said to be in the possession of Daphne McIntosh.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1048315, having an area of 5733 square metres or thereabouts and said to be in the possession of Public Trustee Office, R. M. Bilbe, D. and P. Jones, M. Younan, Dean Gingell, Nancy Cory Taylor, K. B. McCaskill and Ku-ring-gai Council.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1048311, having an area of 7282 square metres or thereabouts and said to be in the possession of Gavin Alan Rea, J. Hall and M. Dicker, Tina Randall, Bobby Ivanoff, Jean McKenzie Edge, Peter James Edge, A. and S. Merriel, Kenneth Lee, Simone Anna Hollak, G. and G. Dring, Dawn Woodward, C. D. and J. U. Trimas, A. S. and S. Gilbert and Ku-ring-gai Council.

All that sub-surface stratum of land situate at Lindfield in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and State of New South Wales, being Lot 1 in Deposited Plan 1048182, having an area of 8016 square metres or thereabouts and said to be in the possession of G. A. Deegan, Anne Penelope Bissaker, Kari Ingham, J. and H. Hocking, G. K. Davis and K. M. Underhill, J. S. Case, D. and L. Hitchen, Lindsay John Cook, S. and C. Gorton and Margaret Hutchinson.

SRA Reference: 013093.

SURVEYORS ACT 1929

Registration of Surveyors

PURSUANT to the provisions of section 8 of the Surveyors Act 1929, the undermentioned persons have been Registered as Surveyors in New South Wales from the dates shown.

Name	Address	Effective Date
Daniel John BAKER	28 Ruby Circuit Port Macquarie NSW 2444	13 January 2003
Steven Thomas BRAILSFORD	2/16 Seaview Avenue Newport NSW 2106	6 January 2003
Karen Elizabeth GREGORY	37 Rae Street Randwick NSW 2031	18 November 2002
Wayne John VANDENTOL	4 Sam Court Shepparton VIC 3630	17 January 2003

W. A. WATKINS,
President.

G. K. A. LEATHERLAND,
Registrar.

SURVEYORS ACT 1929

Restoration to the Register of Surveyors

PURSUANT to the provisions of section 9B of the Surveyors Act 1929, the undermentioned persons have been restored to the Register of Surveyors with the effective dates of restoration as shown.

Name	Address	Effective Date of Restoration	Original Date of Registration
Geoffrey Alan COOK	10 Quarrion Place Woronora Heights NSW 2233	17 December 2002	29 September 1980
Michael Gordon COOKSON	211 Grand Parade Bonnells Bay NSW 2264	17 December 2002	17 May 1999
Brett Clifford CURREY	Lot 1 Tamborine Oxenford Road Upper Coomera QLD 4209	19 December 2002	14 June 1993
Brian Charles GOWEN	12 Woodberry Road Winston Hills NSW 2153	9 December 2002	6 October 1976
Anthony Thomas HARVEY	“Gilgai” Bonalbo NSW 2469	20 December 2002	10 April 1967
Stephen John HOGAN	10 Shearsbey Crescent Yass NSW 2582	10 February 2003	21 April 1980
Theodore MOSSEL	7 Albemarle Street	23 December 2002	19 March 1973

W. A. WATKINS,
President.

G. K. A. LEATHERLAND,
Registrar.

DISTRICT COURT ACT 1973

Direction

IN pursuance of sections 32 and 173 of the District Court Act 1973, I direct the District Court to sit in its Civil and Criminal jurisdictions at the places and at the times as shown in the attached Schedules.

Dated at Sydney, this 12th day of February 2003.

R. O. BLANCH,
Chief Judge.

SCHEDULE

District Court of New South Wales — Calendar of Sittings 2003-04

VENUE	TIME	2/02/2004	9/02/2004	16/02/2004	23/02/2004	1/03/2004	8/03/2004	15/03/2004
ALBURY	10.00 a.m.		C	C	C	CR	CR	CR
ARMIDALE	10.00 a.m.	CR	CR					
BATHURST	10.00 a.m.	CR	CR	CR				
BEGA	10.00 a.m.			CR	CR			
BOURKE	10.00 a.m.							
BROKEN HILL	10.00 a.m.					C	CR	CR
CAMPBELLTOWN	10.00 a.m.	CRx4	CRx4	CRx4	CRx4	CRx4	CRx4	CRx4
COFFS HARBOUR	10.00 a.m.	CR	CR	CR	CR	C	C	
COONAMBLE	10.00 a.m.			CR	CR			
DUBBO	10.00 a.m.	CR	CR	CR	CR	CR	C	C
EAST MAITLAND	10.00 a.m.					CR	CR	CR
FORBES	10.00 a.m.						C	
GOSFORD	10.00 a.m.	CR+C	CR+C	CR	CR	CR	CR	CR+C
GOULBURN	10.00 a.m.					CR	CR	
GRAFTON	10.00 a.m.			CR	CR	CR	C	C
GRIFFITH	10.00 a.m.	CR	CR					
INVERELL	10.00 a.m.							
KATOOMBA	10.00 a.m.							
LISMORE	10.00 a.m.	CR+C	CR+C	CR+C	CR	CR	CR	CR
LITHGOW	10.00 a.m.							
MAITLAND at East Maitland	10.00 a.m.				C	C		
MOREE	10.00 a.m.	CR	CR	CR				
NEWCASTLE	10.00 a.m.	CR+Cx2	CR+Cx2	CR + Mining	CR	CR + Mining	CR	CR+C+Mining
NOWRA	10.00 a.m.							CR
ORANGE	10.00 a.m.			C	C		CR	CR
PARKES	10.00 a.m.							
PARRAMATTA	10.00 a.m.	CRx3+C	CRx3+C	CRx3+C	CRx3+C	CRx3+C	CRx3+C	CRx3+C
PENRITH	10.00 a.m.	CRx3	CRx3	CRx3	CRx3	CRx3	CRx3	CRx3
PORT MACQUARIE	10.00 a.m.				C	C		CR
QUEANBEYAN	10.00 a.m.	CR	CR					
SYDNEY	10.00 a.m.	CR+C	CR+C	CR+C	CR+C	CR+C	CR+C	CR+C
TAMWORTH	10.00 a.m.				CR	CR	CR	
TAREE	10.00 a.m.	C	C		CR	CR		
WAGGA WAGGA	10.00 a.m.		CR	CR	CR	C	C	C
WENTWORTH	10.00 a.m.							
WOLLONGONG	10.00 a.m.	CR+C	CR+C	CR+C	CR+C	CR	CR	CR+Cx2

VENUE	TIME	22/03/2004	29/03/2004	5/04/2004	15 & 16/4	19/04/2004	26/04/2004	3/05/2004
ALBURY	10.00 a.m.							
ARMIDALE	10.00 a.m.	C	C				CR	CR
BATHURST	10.00 a.m.	CR	CR	CR				
BEGA	10.00 a.m.		C					
BOURKE	10.00 a.m.							
BROKEN HILL	10.00 a.m.							
CAMPBELLTOWN	10.00 a.m.	CRx4	CRx3+C	CRx3+C	CRx4	CRx4	CRx4	CRx4
COFFS HARBOUR	10.00 a.m.	CR	CR	CR				C
COONAMBLE	10.00 a.m.							
DUBBO	10.00 a.m.	CR	CR	CR				
EAST MAITLAND	10.00 a.m.							
FORBES	10.00 a.m.							
GOSFORD	10.00 a.m.	CR+C	CR	CR	CR	CR	CR	CR
GOULBURN	10.00 a.m.					CR	CR	CR
GRAFTON	10.00 a.m.							
GRIFFITH	10.00 a.m.	C	C					CR
INVERELL	10.00 a.m.		CR	CR				
KATOOMBA	10.00 a.m.							Mining
LISMORE	10.00 a.m.	C	C	C		CR	CR	CR
LITHGOW	10.00 a.m.		C	C				
MAITLAND at East Maitland	10.00 a.m.							C
MOREE	10.00 a.m.							CR
NEWCASTLE	10.00 a.m.	CR+C	CR+C	CR+C	CR	CR + Mining	CR+Cx2	CR+Cx2
NOWRA	10.00 a.m.	CR						
ORANGE	10.00 a.m.						C	C
PARKES	10.00 a.m.							
PARRAMATTA	10.00 a.m.	CRx3+C	CRx3	CRx3	CRx3+C	CRx3+C	CRx3+C	CRx3
PENRITH	10.00 a.m.	CRx3	CRx3	CRx3	CRx3	CRx3	CRx3	CRx3+C
PORT MACQUARIE	10.00 a.m.	CR	CR					
QUEANBEYAN	10.00 a.m.		CR	CR			C	C
SYDNEY	10.00 a.m.	CR+C	CR+C	CR+C	CR+C	CR+C	CR+C	CR+C
TAMWORTH	10.00 a.m.							C
TAREE	10.00 a.m.						C	C
WAGGA WAGGA	10.00 a.m.	C	CR	CR				
WENTWORTH	10.00 a.m.							
WOLLONGONG	10.00 a.m.	CR+Cx2	CR+C+Mining	CR+C	CR	CR	CR+C	CR+C

VENUE	TIME	10/05/2004	17/05/2004	24/05/2004	31/05/2004	7/06/2004	15/06/2004	21/06/2004
ALBURY	10.00 a.m.		CR	CR	CR	C	C	C
ARMIDALE	10.00 a.m.	CR						
BATHURST	10.00 a.m.		C	C		CR	CR	CR
BEGA	10.00 a.m.	CR	CR	CR				
BOURKE	10.00 a.m.				CR	CR	CR	
BROKEN HILL	10.00 a.m.					CR	CR	CR
CAMPBELLTOWN	10.00 a.m.	CRx4	CRx4	CRx4	CRx4	CRx4	CRx4	CRx4
COFFS HARBOUR	10.00 a.m.	C			CR	CR	CR	CR
COONAMBLE	10.00 a.m.	CR	CR	CR				
DUBBO	10.00 a.m.	C	C	CR	CR	CR	CR	CR
EAST MAITLAND	10.00 a.m.			CR	CR	CR		
FORBES	10.00 a.m.							
GOSFORD	10.00 a.m.	CR	CR	CR	CR	CR	CR+C	CR+C
GOULBURN	10.00 a.m.			C			CR	CR
GRAFTON	10.00 a.m.	CR	CR					
GRIFFITH	10.00 a.m.	CR						
INVERELL	10.00 a.m.							
KATOOMBA	10.00 a.m.							
LISMORE	10.00 a.m.	CR	CR	CR	CR+C	CR+C	CR+C	CR
LITHGOW	10.00 a.m.							
MAITLAND at East Maitland	10.00 a.m.	C						
MOREE	10.00 a.m.	CR						
NEWCASTLE	10.00 a.m.	CR+C+Mining	CR+C	CR+C+Mining	CR+C	CR+C	CR+C	CR+C+Mining
NOWRA	10.00 a.m.	C	C	CR	CR			
ORANGE	10.00 a.m.	C	CR	CR	CR			
PARKES	10.00 a.m.			CR	CR	CR		
PARRAMATTA	10.00 a.m.	CRx3	CRx3	CRx3+C	CRx3+C	CRx3+C	CRx3+C	CRx3+C
PENRITH	10.00 a.m.	CRx3+C	CRx3+C	CRx3	CRx3	CRx3	CRx3	CRx3
PORT MACQUARIE	10.00 a.m.		C	C			CR	CR
QUEANBEYAN	10.00 a.m.				CR	CR		
SYDNEY	10.00 a.m.	CR+C	CR+C	CR+C	CR+C	CR+C	CR+C	CR+C
TAMWORTH	10.00 a.m.	C	C		CR	CR		
TAREE	10.00 a.m.		CR	CR				
WAGGA WAGGA	10.00 a.m.		C	C	C		CR	CR
WENTWORTH	10.00 a.m.							
WOLLONGONG	10.00 a.m.	CR+C	CR+C	CR	CR	CR+Mining	CR+C	CR+C

TENDERS

Department of Public Works and Services

SUPPLIES AND SERVICES FOR THE PUBLIC SERVICE

TENDERS for the undermentioned Period Contracts, Supplies and Services, required for the use of the Public Service, will be received by the Department of Public Works and Services, Level 3, McKell Building, 2-24 Rawson Place, Sydney, NSW 2000, up til 9.30 am on the dates shown below:

26 February 2003

0203274 EMPLOYEE ASSISTANCE SERVICES FOR NSW FIRE BRIGADES. DOCUMENTS: \$110.00 PER SET

4 March 2003

S0218928 SECONDARY RESOURCE USE OF PRE-TREATED MUNICIPAL SOLID WASTE. DOCUMENTS: \$220.00 PER SET

6 March 2003

IT 036/2946 HYDRAULIC & AIR OPERATED RESCUE EQUIPMENT. DOCUMENTS: \$110.00 PER SET

13 March 2003

025/6037 PEST CONTROL SERVICES. DOCUMENTS: \$110.00 PER SET

18 March 2003

S0232875 CLEANING OF CENTRAL COAST AHS - VARIOUS SITES. CATEGORY B. INSPECTION DATE & TIME: 19/02/2003 @ 9:30 AM SHARP. AREA: 13,251 SQ. METERS. DOCUMENTS: \$55.00 PER SET

036/250 CONTINENCE & SEXUAL HEALTH PRODUCTS. DOCUMENTS: \$110.00 PER SET

2 April 2003

0203185 SUPPLY OF PROTECTIVE CLOTHING FOR THE NSW RURAL FIRE SERVICE. DOCUMENTS: \$110.00 PER SET

TENDER DOCUMENT FEE

Tender documents for inspection and purchase, and application forms for Expression of Interest are available at the address above. Where charges apply for tender documents, they are not refundable, cheques and credit cards (Bankcard, Mastercard and Visa) only are acceptable, payable to Department of Public Works and Services. NO CASH payments will be accepted. Documents can be Express Posted on request at an extra cost. Non attendance of mandatory site meetings will render tenders informal.

Further Information is available on the Internet (<http://www.dpws.nsw.gov.au/tenders>).

PRIVATE ADVERTISEMENTS

COUNCIL NOTICES

BALRANALD SHIRE COUNCIL

Roads Act 1993, Section 10 (1)
Dedication Of Land As Public Road

NOTICE is hereby given by Balranald Shire Council that pursuant to Section 10 (1) of the Roads Act 1993 that the land described in the schedule is dedicated as public road. Dated at Balranald this 13th day of February 2003. D.R. HETHERINGTON, Acting General Manager, Balranald Shire Council, PO Box 120, Balranald, NSW 2715.

SCHEDULE

Lot 6, part DP 848352 [0122]

GOSFORD CITY COUNCIL

Roads Act 1993

Naming of Public Road – Montrae Close

NOTICE is hereby given that Council has named a public road at Bensville, **MONTRAE CLOSE, BENSVILLE**. Authorised by Council Resolution on 5 November 2002. P. WILSON, General Manager, Gosford City Council, PO Box 21, Gosford NSW 2250



[0123]

PARRAMATTA CITY COUNCIL

Roads Act 1993, Section 162

Naming of Public Roads

NOTICE is hereby given that the Parramatta City Council, in pursuance of section 162 of the Roads Act 1993, proposes to name the roads as shown in the Schedule hereunder.

Description of Road	New Name
---------------------	----------

That formed road running parallel to Old Windsor Road, on the northern side of, and connecting to Hammers Road, and currently informally known as Centenary Drive, Old Toongabbie.	Centenary Avenue
--	------------------

That formed lane on the southern side of and running parallel to Guildford Road, and intersecting with both sides of Station Street, Guildford.	Collins Lane
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That formed road adjacent to and on the eastern side of "Experiment Farm Cottage" and which connects Alice Street to Ruse Street, Harris Park.	Farm Way
--	----------

Authorised by resolution of Council on 10th December 2002. TERRY BARNES, General Manager, Parramatta City Council, PO Box 32, Parramatta NSW 2124. [0129]

TWEED SHIRE COUNCIL

Local Government Act 1993

Land Acquisition (Just Terms Compensation) Act 1991
Notice of Compulsory Acquisition of Easement Over Land
THE Tweed Shire Council declares, with the approval of Her Excellency the Governor, that the easement for sewer rising mains over lands described in the Schedule below, is acquired by compulsory process in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act. Dated at Murwillumbah this 20th day of November 2002. M. J. RAYNER, Acting General Manager, Tweed Shire Council, PO Box 816, Murwillumbah, NSW 2484.

SCHEDULE

Easement for sewer rising main 3 wide within Lot 501, DP 728234 and Lot 507, DP 728257 as shown in DP 1044500. [0141]

TWEED SHIRE COUNCIL

Local Government Act 1993

Land Acquisition (Just Terms Compensation) Act 1991
Notice of Compulsory Acquisition of Easement Over Land
THE Tweed Shire Council declares, with the approval of Her Excellency the Governor, that the easement for water supply over land, described in the Schedule below, excluding mines and deposits of minerals within the land are acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991. Dated at Murwillumbah this 20th day of November 2002. M. J. RAYNER, Acting General Manager, Tweed Shire Council, PO Box 816, Murwillumbah, NSW 2484.

SCHEDULE

Easement for water supply 5 wide as shown in DP 1042668. [0142]

GUNDAGAI SHIRE COUNCIL

Local Government Act 1993, Section 713

Sale of Land for Overdue Rates

NOTICE is hereby given to the persons named hereunder that the Council of Gundagai has resolved in pursuance of section 713 of the Local Government Act 1993, to sell the land described hereunder of which the persons named appear to be the owners or in which they appear to have an interest and on which the amount of rates stated in each case, as at 19th February, 2003 are due:

Owner(s) or person(s) having interest in the land	Description of subject land	Amount of rates and charges (including extra charges) overdue for more than five (5) years	Amount of all other rates and charges (including extra charges) payable and unpaid	Total
(a)	(b)	(c)	(d)	(e)
MS V. SALON	Pt Lot 5, DP 875165, Tarrabandra Parish, Gundagai.	\$324.31	\$1,718.56	\$2,042.87

In default of payment to the Council of the amount stated in Column (e) above and any other rates (including extra charges) becoming due and payable after publication of this notice, or an arrangement satisfactory to the Council for payment of all such rates being entered into by the rateable person, before the time fixed for the sale, the said land will be offered separately for sale by public auction at the Council Chambers, 255 Sheridan Street, Gundagai on Friday, 6th June, 2003 at 3.00 p.m. G. A. J. TICKNER, General Manager, Gundagai Shire Council, 255 Sheridan Street, Gundagai, NSW 2722. [0130]

MULWAREE SHIRE COUNCIL

Local Government Act 1993, Section 713

Sale Of Land For Unpaid Rates

NOTICE is hereby given to the person(s) named hereunder that Mulwaree Shire Council proposes to sell the land described hereunder for unpaid rates and charges:

Owner(s) or person(s) having interest in the land	Description of subject land	Amount of rates and charges (including extra charges) overdue for more than five (5) years	Amount of all other rates and charges (including extra charges) payable and unpaid	Total
(a)	(b)	(c)	(d)	(e)
Robert Frederick SOLWAY	Rate Assessment 1019-03 Being Lot 3 DP 250125. 195 Taylors Creek Road, TARAGO. Area 16.49 Ha.	\$2,030.21 (includes \$234.46 interest charges)	\$3,076.91 (includes \$911.91 interest charges)	\$5,107.12 (includes \$1146.37 interest charges)

If all rates and charges payable (including overdue rates and charges) are not paid to Council or an arrangement made satisfactory to the Council is not entered into by the rateable person before the time fixed for sale, the Council will proceed with the sale. The auctioneer is Graeme Welsh Real Estate 271 Auburn Street GOULBURN NSW 2580 tel. (02) 4822 5737. The sale will be by public auction and will be held at the Goulburn Soldiers Club, 15 Market Street on 24 May 2003 at 12.00 pm. This advertisement supersedes the one placed in the *Government Gazette* of week 6/2003. For enquiries please contact Council on tel 02 4823 7400. R. F. MOWLE, General Manager. [0118]

RYLSTONE SHIRE COUNCIL

Local Government Act 1993

Sale Of Land For Overdue Rates

NOTICE is hereby given to the person(s) named hereunder that the Council of the Shire of Rylstone has resolved in accordance with Sections 713 to 726 of the Local Government Act, 1993 to sell the land described of which the persons named appear to be the owners or in which they appear to have an interest and of which the amount of rates and charges stated as at 10 February 2003 are overdue:

Owner	Description of land	Amount of rates (including extra charges overdue)	Amount of all other rates and extra charges due and in arrears	Total
(a)	(b)	(\$) (c)	(\$) (d)	(\$) (e)
Mr D. and Mrs T. HARRIS	26 Farrelly Street Clandulla Lot 3 DP 758249 Sec 18	1318.39	3230.87	4549.26
Mrs B. D. NORRIS	8 Coomber Street Charbon Lot 67 DP 14595	24.59	9249.92	9274.51
Mr R. J. SACK and Mrs L. J. NORRIS	Mountain Street Charbon Lots 131 and 132 DP 14595	392.90	5873.59	6266.49
Mr R. KUZMIC	22 Mountain Street Charbon Lot 133 DP 14595	1373.15	6071.62	7444.77
Mr H. J. and Mrs L. M. RENS	12 Standard Avenue Charbon Lot 7 DP 14595	390.49	5210.42	5600.91

In default of payment to the Council of the amount stated in column (e) above, together with any other rates (including extra charges) becoming due and payable after the publication of this notice, the said land will be offered for sale by public auction at the Rylstone Memorial Hall, Louee Street, Rylstone on Saturday 24 May 2003 at 10.00 am. JOHN A. SUMMERS, General Manager. [0127]

ESTATE NOTICES

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of EUGENE ZAK, late of 29B Norfolk Street, Liverpool, in the State of New South Wales, Radio Tester, who died on 30th August 2000, must send particulars of his/her claim to the Executrix, Irene Valerie Zak, c.o. Maclarens, Solicitors, 232 Merrylands Road, Merrylands, within one (1) calendar month from publication of this notice. After that time the executrix may distribute the assets of the estate having regard only to the claims of which at the time of distribution she has notice. Probate was granted in New South Wales on 30th January 2003. MACLARENS, Solicitors, 232 Merrylands Road, Merrylands NSW 2160 (DX 25406, Merrylands), tel.: (02) 9682 3777. [0125]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of GLADYS CLIFTON, late of 17 Pangari Crescent, St George, in the State of New South Wales, Home Duties, who died on 22nd October 2002, must send particulars of his/her claim to the Executors, Carol Anne Clark and David Ian Clark, c.o. Maclarens, Solicitors, 232 Merrylands Road, Merrylands, within one (1) calendar month from publication of this notice. After that time the executors may distribute the assets of the estate having regard only to the claims of which at the time of distribution they have notice. Probate was granted in New South Wales on 30th January 2003. MACLARENS, Solicitors, 232 Merrylands Road, Merrylands NSW 2160 (DX 25406, Merrylands), tel.: (02) 9682 3777. [0126]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of ELIZABETH MITCHELL, late of Bossley Park Nursing Home, Bossley Park, in the State of New South Wales, Widow, who died on 14th April 2002, must send particulars of his/her claim to the Executor, Gordon John Mitchell, c.o. Maclarens, Solicitors, 232 Merrylands Road, Merrylands, within one (1) calendar month from publication of this notice. After that time the executor may distribute the assets of the estate having regard only to the claims of which at the time of distribution he has notice. Probate was granted in New South Wales on 10th February 2003. MACLARENS, Solicitors, 232 Merrylands Road, Merrylands NSW 2160 (DX 25406, Merrylands), tel.: (02) 9682 3777. [0119]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of MARJORIE JEREZ, late of 1 Savage Street, Lawson, in the State of New South Wales, Travel Agent, who died on 12th July 2002, must send particulars of his/her claim to the Executors, Sabrina Mengoni and Chantell Mengoni, c.o. Whitfields, Solicitors, Level 1, 46 Lyons Road, Drummoyne, within one (1) calendar month from publication of this notice. After that time the executors may distribute the assets of the estate having regard only to the claims of which at the time of distribution they have notice. Probate was granted in New South Wales on 11th February 2003. WHITFIELDS, Solicitors, Level 1, 46 Lyons Road, Drummoyne NSW 2047, tel.: (02) 9819 6299. [0126]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of IAN WILLIAM SMITH, late of Empire Bay, in the State of New South Wales, Retired, who died on 16th November 2002, must send particulars of his/her claim to the Executor, Calvin William Burford (in the Will called Calvin Burford), c.o. Peninsula Law, Solicitors, 103-105 Blackwall Road, Woy Woy or their agents Turner Whelan, Solicitors, Level 2, 162 Goulburn Street Sydney, within one (1) calendar month from publication of this notice. After that time the executor may distribute the assets of the estate having regard only to the claims of which at the time of distribution he has notice. Probate was granted in New South Wales on 4th February 2003. PENINSULA LAW, Solicitors, 103-105 Blackwall Road, Woy Woy, NSW 2256 (DX 8806, Woy Woy), tel.: (02) 4342 1277. [0121]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of SUKHENDRA NATH, late of 24 Heath Street, Prospect, in the State of New South Wales, accountant, who died on 21st August, 2002 must send particulars of his claim to the executor, Jitendra Nath, c.o. Low Doherty & Stratford, Solicitors, 9 Campbell Street, Blacktown, within one (1) calendar month from publication of this notice. After that time the executor may distribute the assets of the estate having regard only to the claims of which at the time of distribution he has notice. Probate was granted in New South Wales on 30th January, 2003. LOW DOHERTY & STRATFORD, Solicitors, 9 Campbell Street, Blacktown, NSW 2148 (DX 8109, Blacktown), tel.: (02) 9622 4644. [0131]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of JEAN DAPHNE SPAIN, late of Kingsford, in the State of New South Wales, widow, who died on 19th June, 2000 must send particulars of his claim to the executrix, Julie Spain, c.o. Mervyn Finlay, Thorburn & Marshall, Solicitors, Level 2 Windeyer Chambers, 225 Macquarie Street, Sydney, Reference: DLT, within one (1) calendar month from publication of this notice. After that time the executrix may distribute the assets of the estate having regard only to the claims of which at the time of distribution she has notice. Probate was granted in New South Wales on 10th February, 2003. MERVYN FINLAY, THORBURN & MARSHALL, Solicitors, Level 2 Windeyer Chambers, 225 Macquarie Street, Sydney, NSW 2000 (DX 796, Sydney), tel.: (02) 9223 6544. [0132]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of ROSEMARY MATILDA KEALY, late of 1 Harden Street, Canley Heights, in the State of New South Wales, who died on 25th January, 1968 must send particulars of his claim to the executrix, Myrtle Rae Smith, c.o. Colquhoun & Colquhoun, Solicitors, 588 Darling Street, Rozelle, within one (1) calendar month from publication of this notice. After that time the executrix may distribute the assets of the estate having regard only to the claims of which at the time of distribution she has notice. Letters of Administration were granted in New South Wales on 14th February, 2003. COLQUHOUN & COLQUHOUN, Solicitors, 588 Darling Street, Rozelle, NSW 2039. [0140]

COMPANY NOTICES

NOTICE of final meeting.—FRED & MARIE WESTLEY INVESTMENTS PTY LIMITED (In Voluntary Liquidation) A.C.N. 000 641 181.—Notice is given that pursuant to section 509 of the Corporations Act 2001, that the final meeting of members of the above company will be held at the office of Pringle Moriarty & Co., Suite 12C, 44 Oxford Road, Ingleburn, on 24th March 2003 at 10.30 a.m. for the purpose of laying before the meeting the liquidator's final account and report and giving any explanation thereof. Dated 17th February 2003. STANLEY MORIARTY, Liquidator, Pringle Moriarty & Co., Chartered Accountants, Suite 12C, 44 Oxford Road, Ingleburn, NSW 2565, tel.: (02) 9605 1344. [0128]

NOTICE of voluntary winding up.—BARBERS BREEDING FARM PTY LIMITED (In Liquidation) A.C.N. 000 767 948.—Notice is hereby given that by a special resolution passed at the general meeting of shareholders of Barbers Breeding Farm Pty Ltd (in liquidation), duly convened and held on 31 January 2003, it was resolved that the company be wound up voluntarily and that Stephen John Matthews be appointed Liquidator. Notice is also given that creditors having claim against the company should furnish particulars of that claim to the Liquidator within twenty-one (21) days of this date, otherwise distribution of the assets will take place without regard to such claims. Dated 31 January 2003. S. J. MATHEWS, Liquidator, c.o. Boughton Cook & Truman, Chartered Accountants, 1st Floor, 3 Fitzroy Street, Tamworth NSW 2340, tel.: (02) 6766 4877. [0124]

NOTICE of the final meeting convened by liquidator.—Corporations Law, sub-sections 509 (3) and (4).—DROEGHERS WHARF PASTORAL STUD PTY LIMITED (In voluntary liquidation), ACN 001 420 364.—Notice is hereby given that a final meeting of members of the abovenamed company will be held at 10.00 a.m. on Monday, 24th March, 2003 at Level 1, 20 Wallis Street, Forster for the purpose of having an account laid before them showing the manner in which the winding up has been conducted and the property of the company disposed of and hearing any explanation that may be given by the liquidator. Dated 13th February, 2003. ROGER IRWIN LYNCH and STUART WILLIAM HORSBURGH, Liquidators, c.o. Walker Lynch Petersen, Chartered Accountants, Level 1, 20 Wallis Street, Forster, NSW 2428, tel.: (02) 6554 7566. [0133]

NOTICE of winding up Order.—BLACKBURN'S BACKYARDS PTY LIMITED (In liquidation), ACN 070 962 588.—On 13th February, 2003 the Supreme Court of New South Wales, Equity Division made an Order that the company be wound up and appointed myself to be official liquidator. Dated this 17th day of February 2003. BRIAN RAYMOND SILVIA, Official Liquidator, c.o. Ferrier Hodgson, Chartered Accountants, Level 17, 2 Market Street, Sydney, NSW 2000. [0134]

NOTICE of voluntary liquidation.—ULTIMATE ACHIEVEMENT PTY LIMITED (In voluntary liquidation), ACN 074 536 342.—Notice is hereby given that at a general meeting of members, duly convened and held at the offices of Pringle Moriarty & Co., Chartered Accountants, Suite 12c, 44 Oxford Road, Ingleburn on 18th February, 2003 at 11.00 a.m., the following resolution was passed as a special resolution: "That the company be wound up voluntarily and that Stanley Moriarty of Suite 12c, 44 Oxford Road, Ingleburn be appointed liquidator for the purposes of the winding up". S. MORIARTY, Liquidator, c.o. Pringle Moriarty & Co., Suite 12c, 44 Oxford Road, Ingleburn, NSW 2565, tel.: (02) 9605 1344. [0135]

NOTICE of final meeting of members.—KYLPRESS PTY LIMITED (In liquidation), ACN 003 239 512.—Notice is hereby given that pursuant to section 509 of the Corporations Law, the final meeting of members of the abovenamed company will be held at the offices of Loughhead Roberts of 62 Prospect Street, Rosehill, NSW 2142 on the 31st day of March, 2003 at 9.00 a.m. for the purpose of laying before the meeting the liquidator's final account and report and giving any explanation thereof. Dated this 6th day of February, 2003. JAMES LUKE HAJINAKITAS, Liquidator, 180A Marsden Road, Dundas, NSW 2117. [0136]

NOTICE of final meeting of members and creditors.—MANN CONTRACTORS PTY LIMITED (In liquidation), ACN 088 032 099.—Notice is hereby given that the final meeting of members and creditors of the abovenamed company will be held pursuant to section 509 of the Corporations Act 2001 at the offices of Nationwide Tax & Professional Services, 1 Kempsey Street, Blacktown, NSW 2148 on Monday, 24th March, 2003 at 3.00 p.m., for the purpose of laying before the meeting an account showing how the winding up has been conducted and the property of the company has been disposed of and giving any explanation thereof. Dated this 21st February, 2003. DAVID J. DOBERER, Liquidator, c.o. Nationwide Tax & Professional Services, 1 Kempsey Street, Blacktown, NSW 2148, tel.: (02) 9672 3043. [0137]

NOTICE of final meeting of members and creditors.—PAPS BRICKIES PTY LIMITED, ACN 003 965 615.—Notice is hereby given that the final meeting of members and creditors of the abovenamed company will be held pursuant to section 509 of the Corporations Act 2001 at the offices of Nationwide Tax & Professional Services, 1 Kempsey Street, Blacktown, NSW 2148 on Monday, 24th March, 2003 at 10.00 a.m., for the purpose of laying before the meeting an account showing how the winding up has been conducted and the property of the company has been disposed of and giving any explanation thereof. Dated this 21st February, 2003. DAVID J. DOBERER, Liquidator, c.o. Nationwide Tax & Professional Services, 1 Kempsey Street, Blacktown, NSW 2148, tel.: (02) 9672 3043. [0138]

NOTICE of final meeting of members and creditors.—
NAYCOTT SERVICES PTY LIMITED, ACN 003 467 007.—
Notice is hereby given that the final meeting of members and creditors of the abovenamed company will be held pursuant to section 509 of the Corporations Act 2001 at the offices of Nationwide Tax & Professional Services, 1 Kempsey Street, Blacktown, NSW 2148 on Monday, 24th March, 2003 at 11.30 a.m., for the purpose of laying before the meeting an account showing how the winding up has been conducted and the property of the company has been disposed of and giving any explanation thereof. Dated this 21st February, 2003. DAVID J. DOBERER, Liquidator, c.o. Nationwide Tax & Professional Services, 1 Kempsey Street, Blacktown, NSW 2148, tel.: (02) 9672 3043. [0139]
